



HARVARD UNIVERSITY.



LIBRARY

OF THE

MUSEUM OF COMPARATIVE ZOÖLOGY

12,005

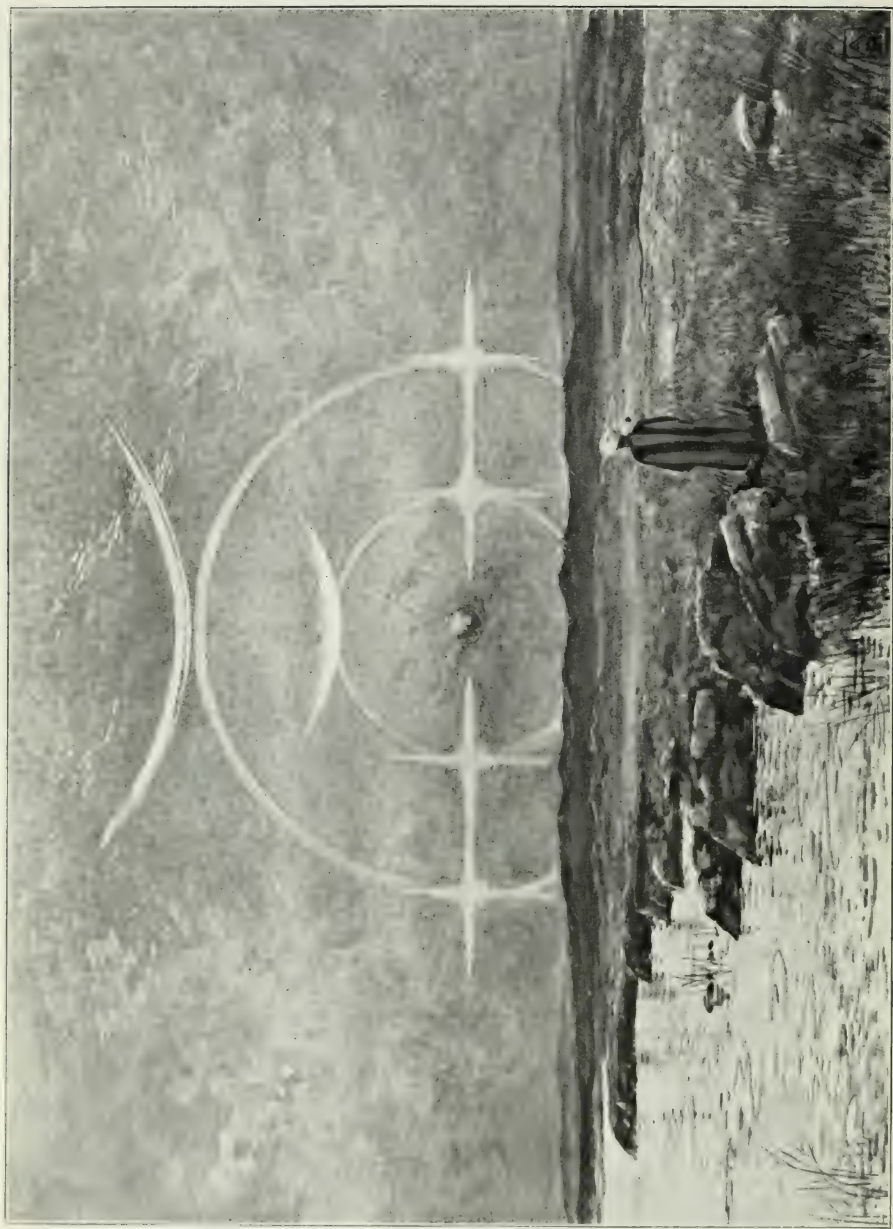
Exchange.

October 24, 1921.

OCT 24 1921

JOURNAL OF THE TRANSACTIONS
OF
THE VICTORIA INSTITUTE.

VOL. XLI.



THE VISION OF EZEKIEL.

Copyright

JOURNAL OF
THE TRANSACTIONS
OF
The Victoria Institute,
OR,
Philosophical Society of Great Britain.

EDITED BY THE SECRETARY.

VOL. XLI.



LONDON :

(Published by the Institute, 1, Adelphi Terrace House, Charing Cross, W.C.)

ALL RIGHTS RESERVED.

1909.

THE
PROCEEDINGS OF
THE HOUSE OF COMMONS

LONDON:

HARRISON AND SONS, PRINTERS IN ORDINARY TO HIS MAJESTY,
ST. MARTIN'S LANE.

PREFACE.

AT the end of a year's work as Secretary to the Victoria Institute, in issuing the first volume of Transactions which it has been my privilege to see through the press, I would wish to acknowledge the generous support and assistance which I have received from the Council and Members; a support which has been most encouraging, and a friendly assistance which has gone far to lighten my labours. In particular I take this opportunity of acknowledging the untiring efforts of Mr. A. E. Montague, whose zealous work at a critical time has been of the greatest value.

The report of the Council, which deserves the most careful consideration of all who are interested in the work of the Institute, deals with the events of the past year in a manner which obviates the necessity of any further preface to a series of papers which from the interest already taken in them, and the attendances at their delivery, would seem in no degree to have fallen behind those of previous years.

H. CHARLEWOOD TURNER, M.A.,
Secretary.

CONTENTS.

	PAGE
PREFACE	v
Forty-third Annual Report	1
THE ANNUAL GENERAL MEETING, HELD IN THE HOUSE OF THE SOCIETY OF ARTS, MONDAY, JUNE 21ST, 1909. THE RT. HON. THE EARL OF HALSBURY, D.C.L., F.R.S. (<i>President</i>), IN THE CHAIR	9
THE ANNUAL ADDRESS. DELIVERED BY THE PRESIDENT, THE RT. HON. THE EARL OF HALSBURY, D.C.L., F.R.S.	9
488TH ORDINARY GENERAL MEETING. DECEMBER 7TH, 1908.	
PAPER ON "GENEVA AND CHAMOUNIX OF TO-DAY AS COMPARED WITH HALF A CENTURY AGO." BY PROFESSOR E. HULL, LL.D., F.R.S.	17
WITH DISCUSSION	30
489TH ORDINARY GENERAL MEETING. JANUARY 4TH, 1909.	
PAPER ON "LIFE IN A COUNTRY TOWN OF LYCAONIA: BEING A DESCRIPTION OF THE CONDITIONS OF CHRISTIAN LIFE UNDER THE EASTERN EMPIRE." BY PROFESSOR SIR W. M. RAMSAY, F.R.S., D.C.L.	36
WITH DISCUSSION	45
490TH ORDINARY GENERAL MEETING. JANUARY 18TH, 1909.	
PAPER ON "SCIENCE AND THE UNSEEN WORLD." BY DR. A. T. SCHOFIELD	47
WITH DISCUSSION	59

	PAGE
491ST ORDINARY GENERAL MEETING. FEBRUARY 1ST, 1909.	
PAPER ON "CHRISTIANITY AND SOCIALISM." BY THE VEN. W. CUNNINGHAM, ARCHDEACON OF ELY	70
WITH DISCUSSION	84
492ND ORDINARY GENERAL MEETING. FEBRUARY 15TH, 1909.	
PAPER ON "DISCOVERIES IN BABYLONIA AND THE NEIGHBOURING LANDS." BY DR. THEOPHILUS G. PINCHES	99
493RD ORDINARY GENERAL MEETING. MARCH 1ST, 1909.	
PAPER ON "MODERNISM, ITS ORIGIN AND TENDENCIES." BY REV. CHANCELLOR J. J. LIAS, M.A.	122
WITH DISCUSSION ...	133
494TH ORDINARY GENERAL MEETING. MARCH 15TH, 1909.	
PAPER ON "THE LEGISLATIONS OF ISRAEL AND BABYLONIA." BY H. M. WIENER, ESQ., LL.B.	139
WITH DISCUSSION	163
495TH ORDINARY GENERAL MEETING. APRIL 5TH, 1909.	
PAPER ON "EZEKIEL'S VISION OF THE DIVINE GLORY." BY C. A. CARUS-WILSON, ESQ.	167
496TH ORDINARY GENERAL MEETING. APRIL 19TH, 1909.	
PAPER ON "THE PRESENT POSITION OF CATHOLICS IN FRANCE." BY REV. A. GALTON	173
WITH DISCUSSION	193
497TH ORDINARY GENERAL MEETING. MAY 3RD, 1909.	
PAPER ON "THE DATE OF THE NATIVITY WAS 8 B.C." BY LIEUT.-COLONEL G. MACKINLAY	197
WITH DISCUSSION	210

498TH ORDINARY GENERAL MEETING. MAY 17TH, 1909.

PAPER ON "AUTHORITY." BY THE VERY REV. H. WACE, D.D.,	
DEAN OF CANTERBURY	221
WITH DISCUSSION	231

BIOGRAPHICAL NOTICE OF THE LATE MR. WILFRED H. HUDLESTON 240

LIST OF THE VICE-PATRONS, COUNCIL AND OFFICERS, MEMBERS,
ASSOCIATES, LIBRARY ASSOCIATES, HON. CORRESPONDING
MEMBERS, HON. CORRESPONDENTS, AND MISSIONARY ASSOCIATES 241

OBJECTS, CONSTITUTION AND BYE-LAWS.

SOCIETIES EXCHANGING TRANSACTIONS WITH THE INSTITUTE.

. *The Institute's object being to investigate, it must not be held to endorse the various views expressed either in the Papers or discussions.*

VICTORIA INSTITUTE.

REPORT OF THE COUNCIL FOR THE YEAR 1908.

1. *Meetings.*

The meetings of the Institute during the past session have been well attended and the discussions keenly maintained.

The subjects dealt with may be arranged under the following heads :—

1. PHILOSOPHICAL.

“Science and the Unseen World.” By Dr. A. T. SCHOFIELD, M.D.

2. HISTORICAL.

a. Ancient History and Archaeology.

“Discoveries in Babylonia and the neighbouring lands.” By Dr. T. G. PINCHES, LL.D.

“Legislations of Israel and Babylonia.” By Mr. H. M. WIENER, M.A., LL.B.

“Life in a country town of Lycaonia : a description of the conditions of Christian life under the Eastern Empire.” By Professor Sir WILLIAM M. RAMSAY, D.C.L.

b. Contemporary Movements.

“Christianity and Socialism.” By the Ven. the Archdeacon of Ely, Dr. W. CUNNINGHAM, D.D.

“Authority.” By the Very Rev. H. WACE, D.D., Dean of Canterbury.

“Modernism, its origin and tendencies.” By the Rev. CHANCELLOR LIAS, M.A.

“The present position of Catholics in France.” By Rev. A. GALTON, M.A.

3. BIBLICAL.

“Ezekiel's vision of the Divine Glory.” By Mr. C. A. CARUS-WILSON, M.A., M.Inst.E.E.

“8 B.C. The date of the Nativity.” By Lieut.-Colonel G. MACKINLAY.

4. GEOGRAPHICAL.

“Geneva and Chamounix, half a century ago and to-day.” By Professor E. HULL, LL.D. F.R.S.

It will be seen that while the subjects discussed during the session have been of wide interest, special opportunity has been given for the discussions of the practical problems of the day. In bringing the Victoria Institute into closer touch with contemporary movements the Council look with confidence for the support of all those interested in the work of the Institute.

2. *Grants of Literature.*

The usual grants of literature have been made to over thirty societies engaged in Missionary and Christian Propaganda work.

3. The following is the list of the Officers and Council for the past year.

President.

The Right Honourable The Earl of Halsbury, M.A., D.C.L., F.R.S.

Vice-Presidents.

Sir T. Fowell Buxton, Bart., K.C.M.G.
 Alexander McArthur, Esq., D.L., J.P.
 Lieut.-Gen. Sir H. L. Geary, K.C.B.
 David Howard, Esq., D.L., F.C.S. (*Trustee*).
 Right Hon. Lord Strathcona and Mount Royal, LL.D., F.G.S.
 Professor E. Hull, LL.D., F.R.S., F.G.S.

Honorary Correspondents.

Sir David Gill, K.C.B., LL.D., F.R.S.	
Professor A. Agassiz, D.C.L., F.R.S.	Professor A. H. Sayce, D.D., LL.D.
Professor E. Naville (<i>Geneva</i>).	Professor Fridtjof Nansen, D.Sc.
Professor Maspero (<i>Paris</i>).	Professor Warren Upham, D.Sc.

Honorary Auditors.

J. Allen, Esq.	|	Lieut.-Col. G. Mackinlay, late R.A.
----------------	--	-------------------------------------

Council.

(*In Order of Election.*)

Rev. Dr. F. W. Tremlett, D.D.	Lieut.-Colonel G. Mackinlay.
Very Rev. Dean Wace, D.D. (<i>Trustee</i>).	General J. G. Halliday.
Rev. Chancellor Lias, M.A.	Colonel T. H. Holbein Hendley, C.I.E.
Rev. Canon R. B. Girdlestone, M.A.	Arthur W. Sutton, Esq., F.L.S., J.P.
Theo. G. Pinches, Esq., LL.D., M.R.A.S.	Rev. Prebendary H. E. Fox, M.A.
Ven. Archdeacon W. M. Sinclair, M.A., D.D.	Professor H. Langhorne Orchard, M.A., B.Sc.
Commander G. P. Heath, R.N.	Rt. Rev. Bishop J. E. Welldon, D.D.
Rev. G. F. Whidborne, M.A., F.G.S., F.R.G.S.	Sydney T. Klein, Esq., F.L.S., F.R.A.S., M.R.I.
Edward S. M. Perowne, Esq., F.S.A. (<i>Hon. Treasurer</i>).	William J. Horner, Esq.
Martin Luther Rouse, Esq., B.L.	Frederick S. Bishop, Esq., M.A., J.P.
Rev. John Tuckwell, M.R.A.S.	A. T. Schofield, Esq., M.D.
Heywood Smith, Esq., M.A. M.D.	

Secretary and Editor of the Journal.

H. Charlewood Turner, M.A.

The following changes in the Council and Officers have taken place during the year. Vacancies on the Council caused by the election of Sir Henry Geary and Professor E. Hull to the office

of Vice-Presidents have been filled by the election of Dr. A. T. Schofield and Dr. Heywood Smith to the Council. The death of Mr. W. H. Hudleston leaves a vacancy in the list of Vice-Presidents, and another is left on the Council by the retirement of Col. C. E. Yate. Mr. H. Charlewood Turner, M.A. Camb., has been appointed Secretary in succession to Professor Hull, of whose advice and support as Vice-President the Council are glad to be still able to avail themselves.

3. *Obituary.*

The Council regret to have to record the death during the past year of the following supporters of the Institute:—

Rev. E. F. Burr, D.D., Rev. E. Blakeslee, Rev. W. Baker, Job Caudwell, Esq., H. C. Corke, Esq., D.D.S., General J. Crofton, R.E., Rev. Morgan Dix, Mrs. Mary Faber, Rev. J. Gould, Charles H. Hooper, Esq., Wilfred H. Hudleston, Esq., F.R.S. (a Vice-President of the Institute), Rev. J. G. Locke, R. Cope Morgan, Esq., Rev. J. H. Rigg, D.D. (Foundation Associate and formerly Member of Council), G. J. Scales, Esq. (Foundation Member), The Most Rev. W. Saumarez Smith, Archbishop of Sydney, Rev. Peter Tinsley, Sir Thomas Wardle, F.G.S., Rev. Charles H. H. Wright, D.D.

4. *New Members and Associates.*

The following are the names of Members and Associates elected since the last Annual Meeting:—

MEMBERS.—Cecil Broadbent, Esq., Rev. Father Gerard, S.J., Miss Madge D. MacEwan, E. Walter Maunder, Esq., F.R.A.S., Martin J. Sutton, Esq., J.P., James W. Thirtle, Esq., LL.D., H. Charlewood Turner, Esq., M.A., Col. F. B. V. White.

ASSOCIATES.—Rev. E. Godfrey Ashwin, M.A., Rev. Hamilton Ashwin, LL.D., Edwin H. Banks, Esq., D.L., J.P., Miss Mary Beachcroft, Henry H. L. Chichester, Esq., William Dale, Esq., F.G.S., Andrew F. Derr, Esq., M.A., George Evans, Esq., Pastor Otto Flugel, F. W. Gilbertson, Esq., J. C. M. Given, Esq., M.D., Rev. Prof. W. H. Hechler, Miss A. E. Hemming, Mrs. Hendley, Miss A. M. Hodgkin, Sydney Lupton, Esq., M.A., Rev. H. J. R. Marston, M.A., Alfred W. Oke, Esq., B.A., LL.M. (Life), Walter R. Perkins, Esq., John Schwartz, Esq., Junr., Rev. J. H. Skrine, M.A., F. P. Trench, Esq., F.R.C.S., Arthur Charlewood Turner Esq., M.A., Rev. R. Charlewood Turner, M.A.

5. *The Gunning Prize.*

The rules governing the award of the Gunning Prize were revised at the beginning of the session, and copies sent to all subscribers. The last date for sending in essays was fixed as March 31st, and there were appointed as judges Professor E. Hull, LL.D., F.R.S., the Rev. Chancellor Lias, M.A., and F. S. Bishop, Esq., M.A.

Nine essays in all were sent in for competition, the subject being "The attitude of Science towards Miracles."

The Judges were unanimous in placing first the essay sent in under the motto *ἔρχεσθε καὶ ἴδετε*. On the opening of the sealed envelope the essay was found to have been written by Professor H. Langhorne Orchard, M.A., B.Sc., to whom therefore the Council have awarded the Gunning Prize of £40.

The essays sent in by the Rev. G. T. Manley, M.A., E. W. Maunder, Esq., F.R.A.S., and Professor J. Y. Simpson, M.A., D.Sc., were adjudged to be deserving of honourable mention.

6. *Proposed change in the Constitution.*

During the session the Council have devoted considerable time to the reorganisation of the Institute's office, and the revision of their own rules of procedure with a view to the more effective transaction of the Institute's business.

They recommend to the consideration of the Institute the following change in procedure which they believe will be found of great benefit:—

- (a) That whereas at present the financial year of the Institute runs from January 1st to December 31st, and the session from December to June with the Annual Meeting in June, the financial year and session shall in future be coterminous, both ending on December 31st.

This will lead to the Annual Meeting being held in the early part of each year, when the report and balance sheet of the whole year and session immediately ended will be presented. It will also lead to the publication of the annual volume in the same year as that in which the printing and binding bills are paid, and do away with the debtor balance varying from £200 to £130 which is at present carried over on the balance sheet year by year.

The Council also recommend to the Members and Associates the following resolution:—

- "One-third of the members of Council shall retire annually but be eligible for re-election: such retirement to be by seniority in election to the Council."

This rule if passed will occasion eight vacancies on the Council in addition to the one already noticed. Members are

reminded that the Council will gladly receive names for the elections to the Council to be added to the names of those retiring members who wish to stand for re-election.

The Council believe that such a rule as is now contemplated would be beneficial in introducing new blood into the Council, and giving to individual members a greater interest in the affairs of the Institute.

The changes in the constitution (§ II) necessary for carrying out this resolution will be brought before Members and Associates by a special notice to be issued at such time as may be found convenient for the calling of a special general meeting.

7. The change of Offices from 8, Adelphi Terrace, to 1, Adelphi Terrace House, was successfully accomplished at the close of the Session 1907-8. The new rooms have been suitable to the needs of the Institute: although for the purpose of one or two meetings it has been deemed advisable to engage the Hall of the Royal Society of Arts which is near at hand in John Street, and on each occasion the attendance has justified this step.

8. *Financial.*

The Council are glad to report that the financial position of the Institute, though not yet all that could be desired, shows some improvement.

The economies effected by the change of offices and the internal reorganisation had not time to take full effect in the year under review, 1908: but the monthly balances of the current year (1909) bear gratifying testimony to their beneficial operation. The Council trust that the depletion of the reserve fund which has been continuous since 1905, has now reached its limit.

They have, however, to point out that although there is every probability of a satisfactory balance being established for the year 1909, the situation is still critical. On its financial position depends the capacity of the Institute for useful work. Much has been done in the past, and the review of the Session (1908-9) bears witness to the efforts that are being made at the present. Further advance, however, is necessary, and a great increase in the number of supporters, if the Institute is to take the place to which its objects entitle it. There has never been a time at which such a Society was more needed.

But the Victoria Institute cannot command the confidence of

the leaders of Christian and scientific thought if it moves in a groove, or declines into a party position. To do the work that is needed to-day it is necessary to be in touch with the thought of to-day. No society attempting to meet the attacks of the twentieth century with the defences of the middle of the nineteenth century can command the support necessary to the successful conduct of the campaign.

The present is the moment for advance, and the Council appeal with confidence for further support in carrying on the work of the Victoria Institute on the broad Christian lines contemplated by the Founders, who laid it down as their first purpose, "To investigate fully and impartially the most important questions of Philosophy and Science, but more especially those that bear upon the great truths revealed in Holy Scripture; with the view of reconciling any apparent discrepancies between Christianity and Science."

The following statement will show the number of the supporters of the Institute, including hon. corresponding members, at the end of May, 1909:—

Life Members	...	...	...	34 in number.
Annual Members	...	...	...	99 "
Life Associates	...	...	...	66 "
Annual Associates...	...	...	...	273 "
Missionary Associates	...	...	...	13 "
Hon. Corresponding Members	...	...	...	107 "
Library Associates	...	...	...	20 "
Total				<hr/> 612 <hr/>

The Balance Sheet to 31st December, 1908, has been duly audited, the Hon. Auditors being Colonel Mackinlay and Mr. John Allen, to whom the Council tender their thanks.

SPECIAL FUND.

In addition to the subscriptions to the Financial Appeal received last year, the following have since come in and are now acknowledged with thanks:—

				£	s.	d.
Miss C. Tindall	...	...	...	1	1	0
S. Joshua Cooper, Esq.	...	...	...	5	0	0

Conclusion.

Such is a summary of the work and position of the Institute during the past year, and the Council hope that, with the blessing of God, a prosperous future awaits the Institute in the year to come.

Signed on behalf of the Council,

HALSBURY,

President.

The above Report of the Council was read at the Annual Meeting of the Institute held on June 21st in the House of the Royal Society of Arts. Its adoption was moved by Sir Robert Anderson, K.C.B., seconded by Sydney Lupton, Esq., M.A., F.C.S., and on being put to the meeting by the President carried unanimously.

1, *Adelphi Terrace House, Strand, W.C.*

BALANCE SHEET, for the year ending December 31st, 1908.

RECEIPTS.		£	s.	d.	EXPENDITURE.	£	s.	d.
Balance from 1907 ..		..	..	..	Printing ..	..	..	103 13 6
Subscriptions :—1 Member, 1906 ..		..	..	..	Postage ..	..	..	41 19 5
4 Members,	1907 ..	8	8	0	Binding ..	..	..	41 2 7
95 "	1908 ..	199	10	0	Stationery ..	..	..	13 5 10
3 "	1909 ..	6	6	0	Expenses of Meetings	..	..	8 10 0
1 Life Associate		10	10	0	Clerk—Salary ..	..	..	118 1 0
3 Associates,	1905 ..	3	3	0	" Insurance ..	..	..	2 10 10
2 "	1906 ..	2	2	0	Rent... ..	..	..	187 10 0
9 "	1907 ..	9	9	0	Housekeeper ..	..	..	12 0
252 "	1908 ..	264	12	0	Fuel and Light ..	..	..	5 3 8
14 "	1909 ..	14	14	0	Library ..	..	..	10 8 1
Sales ..		520	16	0	Secretaries ..	..	..	235 0 0
Dividends on £770 2½ Consols		..	..	..	Fire Insurance ..	..	..	0 12 0
Donations ..		..	..	..	Bank Charges ..	..	..	2 17 5
Sale of £200 Consols		..	..	..	Sundries ..	..	..	2 12 6
Debtor Balance Bills owing £130 17s. 5d., less cash in hand		..	..	..	Expenses of Removal	..	..	24 19 0
		196	9	8	Draft paid, January, 1909	..	..	2 2 0
					Unpaid Bills	..	..	130 17 5

There is a Capital sum of £570. Consols, also the Capital of the Gunning Trust Fund, £508 Great India Peninsular Railway Stock.

GUNNING PRIZE FUND.		£	s.	d.
Balance from 1907	..	46	15	10
Interest Jan. 13th, 1908	..	13	19	11
" July 3rd, 1908	..	7	4	9
Balance Credit	..	£68	0	6

We have examined the Balance Sheet with the Books and Vouchers and find it correct.

JOHN ALLEN,
GEORGE MACKINLAY, Lt.-Col., } *Auditors.*

May 12th, 1909.

THE ANNUAL GENERAL MEETING OF THE INSTITUTE

WAS HELD (BY KIND PERMISSION) IN THE ROOMS OF
THE ROYAL SOCIETY OF ARTS ON MONDAY,

JUNE 21st, 1909,

THE RIGHT HON. THE EARL OF HALSBURY, D.C.L., F.R.S.,
PRESIDENT, IN THE CHAIR,

When the following Address was delivered by the PRESIDENT :—

I BELIEVE on a former occasion I called attention to the regular succession of the waves of unbelief and superstition; their forms vary infinitely, but their succession in regular periods is certain. Psychological study has become popular, and disputes now more than 2,000 years old have been revived sometimes in the very terms (allowing for the difference of language) that were urged in the times gone by, and metaphysical inquiry has been aroused in no common degree in our time.

Mr. Buckle in his *History of Civilization* said that it may be fairly supposed that the advance of European civilisation is characterised by a diminishing influence of physical laws and an increasing influence of mental laws.

Such phrases are perhaps only intended to express epigrammatically what are the prevailing views upon such subjects, and when we talk of physical laws we mean the facts ascertained by experiment or trial, and by mental laws the results of what many men have told us of the operations of their own individual minds; and the same authority tells us that the mental laws for which he claims such successful influence have only so far been ascertained by proceeding in one of two ways.

He says that if two men of equal ability and equal honesty employ different methods in the study of the mind, the conclusions they obtain will invariably be different, and accordingly, the metaphysicians are divided into two schools of thought between which there is no possibility of concurrence. Now I have no intention of entering into the conflict, fascinating as it

is, but I think one of the principles of the Victoria Institute is to endeavour to understand one another and to use plain speech and not to be terrified by particularly long words, even if their energy is enhanced by capital letters. Just one hundred years ago Lamarck published his *Philosophie Zoologique*, and since his time the theory which he propounded with additions and variations has occupied learned persons ever since. *Biologie der Natur*, *Principles of Biology*, by Herbert Spencer, *Man's Place in Nature*, and the *Evolution of Matter*, have given rise to controversies of inordinate length, but except so far as they touch the foundations of religious belief I do not propose to deal with any part of them.

So far as the question of ideas and sensations go I am not very much interested in the dispute. I suspect in this case as in so many others the disputants are disputing about words and do not always use words in the same sense. Indeed, Darwinism, as the Germans call it, though I think Dr. Packard has proved that it would be more appropriately called Lamarckism, is an interesting study, but what it has to do with a revelation which we believe to be divine is a greater puzzle than any metaphysician has ever invented.

To be sure, I saw quoted the other day the profound remark of a gentleman who has determined to be up-to-date in science, who informed us that modern chemistry had found that transubstantiation was chemically impossible.

It may well be that those who would raise a laugh at such an argument, nevertheless, themselves fall into the same error when assuming analogies that have no real relation to each other. Lamarck says that he could pass in review all classes, all orders, all the genus and species of animals that exist, and that he could prove that the conformation of individuals and of their parts, their organs and faculties is entirely the result of circumstances to which each species has been subjected by *Nature*.

It is to my mind beyond the power of human language to express the wonderful adaptation of the merely animal part of creation to the part they are intended to fill; this is true of each creature from the highest to the lowest, but to most minds this would suggest a Creator incomprehensible and Almighty in power, and that inference would not be got rid of by using the word *Nature* instead of the word *God*.

That God's creation should be gradual or progressive or evolutionary and that his creatures should be endowed with a faculty of development is no more inconsistent with His power

and eternity than the fact that he has given certain qualities to certain portions of matter that they retain as long as they exist at all, and to others the quality of being changed by time or other agents and different circumstances, and becoming apparently different things according to our limited views and feeble nomenclature. Of course, the effort of those whose idea is the deification of man and his self-creation will point to analogies from non-vital things and bring in Man as only a self-superior creation as a deduction from their theories, but this is only one of the many phases of unbelief which from time to time has grown up and which has its day until some more popular notion takes hold of the imagination and succeeds in an ever-recurring cycle in capturing a body of adherents. Indeed, we are now assured "that Primitive Credulity is dead and Intellectual Belief is dying, and that the fate of Christianity rests in the hands of emotional belief."

Unfortunately, emotional belief leads too often to delusion. Joanna Southcott and, in his latter days, Mr. Irving, a preacher of rare eloquence, took to the belief that he had the power of communicating his thoughts in an unknown tongue, and few here can remember the distress which was felt at the injury to the religious belief of many who had been delighted with his eloquence and undoubted piety.

In our own day Professor James finds it to be the worship of material luxury and wealth which constitutes so large a portion of the spirit of our age—that which produces effeminacy and unmanliness.

It is no new experience that emotional and highly sensitive persons should suppose themselves endowed with what for want of a better word I will call supernatural power. I believe there exists among us a fancy that people are distinguished by colours floating round their heads. It is called an "aura." The good are blue, the bad are red, and only people who are enlightened are accommodated with an aura of their own, but, if Mr. James is right in his view of what "the great age produces," it is no wonder that delusions should flourish and that the halo of the mediæval painters should present themselves to weak and hysterical persons as something that they imagine round their own heads, and think they see on their neighbours.

Mr. Ladd in his *Philosophy of Religion* says, "In the United States to-day Christian Science is forming a grotesque mixture of crude Pantheism, misunderstood psychological and philosophical truth, and truly Christian beliefs and conceptions." Whether the great prophet of Christian Science is still alive or

not is, I believe, being still angrily debated in her own country, and I read in a newspaper that the unbelieving have gone so far as to suggest that somebody or something has been dressed up to represent the lady who has for some considerable period been in her grave. Whatever may be the truth about the lady herself there can be no doubt that the statement of Mr. Ladd is borne out by much testimony.

It would be too long a task to go through all the catalogue of cant phrases which represents the barren nonsense of this new phase of human folly, but the recollection of table turning is still too recent to allow us to forget that form of error. A number of distinguished men were invited by the Royal Institution to contribute certain essays. They were not asked to write against table turning, but their essays collected were fitly described as a treatise on education, and they were directed to the discipline of the Mind.

I ask would it not be possible to ask for aid to the Victoria Institute to deal with the same simplicity and terseness in respect of some of the problems which appear to have misled and to be still further misleading the nations. Of this last phase of popular delusion Mr. George B. Cutler, of Yale, treats at page 220 of his treatise, *A Copy of a Monthly Publication of what is called the Society of Silent Unity*. He tells us that a certain leaf is of red paper, and in addition to elaborate instructions for its use given by the editor, the sheet has printed on it the following:—"This sheet has been treated by the Society of Silent Unity after the manner mentioned in Acts xix, 11 and 12.

"Disease will depart from those who repeat silently while holding this in hand the words printed herein: Affirmation for Strength and Power, February 20th to March 20th. Held daily at 9 p.m.

"The Strength and Power of the Divine Mind is now established in me and will go out no more. Affirmation for Prosperity, held daily at 12 noon. The Riches of the Lord Christ are now poured out upon me and I am supplied with everything."

Then follow some testimonials such as one sees following the advertisements of quack medicines.

One of them runs thus: "While holding the red leaf in my hands it caused vibration through my whole system and rheumatic pains that I was troubled with disappeared as if by magic."

Another: "Your treatments for prosperity have done us

much good, and we are feeling more prosperous, which will open the way to our receiving more. Since the treatments our chickens have laid better, the food goes farther and our whole living seems easier."

I rather think Professor Lionel Beale more than once suggested that some of the metaphysical questions should be made the subject of discussion among us, and I think we might follow the example of the Royal Institution in publishing in a small volume some of the addresses, and perhaps the discussions, which have been delivered here by our own distinguished members. I am sure it would be useful, as in the case of the Royal Institution their volume was useful in dissipating the fog of Science falsely so called, and we have not heard much of table turning since the little instrument Professor Faraday invented which put an end to the supposed communication of thought and replies from the dead by knocks on a table. This invention was not so much to prevent intentional fraud as to prevent the unconscious movement of the table by persons who were sincerely under the impression that the table itself moved while without meaning it they were themselves responsible for the movement.

Now there is much need for careful investigation and clear thought at the present time.

It will be observed that Mr. Ladd's description of Christian Science includes truly "Christian Beliefs and Conceptions."

If Mr. Ladd means, as he probably does, that in Mrs. Eddy's book there is a mixture of much silly and terribly profane sentences mixed up with Christian truth in words, one can heartily agree, but without this qualification it is hardly possible to say that there is any Christianity at all in it.

Some scriptural quotations and even the professed belief of the writer herself are so disfigured by what is added, that while one recognises from time to time a Christian truth there, it is followed by an addition or interpretation by the author which makes one shudder by the profanity with which sacred words are put together with such hideous nonsense.

This renders it difficult to give examples since one does not like to quote what one cannot read without pain, but one or two may suffice. At page 218 she says, "They that wait upon the Lord shall run and not be weary, and they shall walk and not faint." The writer seems to have had a dim suspicion of her own profaneness, for she says, "the meaning of that passage is not perverted by applying it literally to moments of fatigue, for the moral and physical are as one in their results."

"When we wake to the truth of being, all disease, weakness, sorrow, sin and death will be unknown and the mortal dream will for ever cease."

"My method of treating of fatigue applies to all bodily ailments since mind should be, and is, supreme, absolute and final."

This is the supposed answer to a complaint that the individual is supposed to make—Toil fatigues me. Now comes the philosophy.

"But what is this me? Is it muscle or is it mind? Without mind would the muscles be tired? Do the muscles talk? Do you talk for them?"

Matter is non-intelligent. Mortal mind does the false talking and that which appeared weariness made that weariness. Here is her own belief:—"Do not believe in any supposed necessity for sin, disease or death, knowing as you ought to know that God never requires obedience to a so-called natural law, for no such law exists. The belief in sin and death is destroyed by the law of God which is the law of life instead of death; of harmony instead of discord; of spirit instead of the flesh. Again as part of the same reasoning if you believe yourself diseased you can alter this wrong belief and action without hindrance from the body."

This is only one specimen of the sort of rhapsody which is the tone of the whole book, where Scripture is continually quoted and ridiculously applied.

At page 251 we learn that "Fright is so great at certain stages of mortal belief as to drive belief into new paths. In the illusion of death mortals wake to the knowledge of two facts. First, that they are not dead, and secondly, that they have but passed the portals of a new belief."

One does not get a much clearer idea of this by what we should call the interpretation clause, titled death, when we are told, "Any material evidence of death is false, for it contradicts the spiritual facts of being."

Although I have had considerable difficulty in quoting without appearing to deal lightly with sacred things, I have no such hesitation about the lady's philosophy, and this reminds me very much of a little professional anecdote which occurred to me when I was at the bar. A witness was being stiffly cross-examined about the absence of a particular person who was alleged to have been present at the transaction which was in dispute, and he accounted for the absence of the person in question by saying that he was dead. "How do you know he

was dead, sir?" said the cross-examining counsel somewhat sharply. "Well, sir," was the answer, "I do not know that he is dead." "Then why did you say he was dead?" "Well, sir," he said, "I do not exactly know he is dead, but I was at the funeral when they buried him on suspicion."

Neither have I much hesitation in referring to the examples of quack advertisements with which we are all of us familiar. One gentleman writes he "had overcome a severe attack of gripe in thirty-six hours by obeying the scriptural saying 'Physician, heal thyself!'"

Then comes the case of a lady who, according to her own account, was treated by eminent physicians for hereditary consumption, torpid liver and many other diseases.

She says her life was a ceaseless torture, but ultimately she borrowed another lady's copy of *Science and Health* two hours each day for eight days and was healed. The first day she read *Science and Health* she weighed about ninety-five pounds. Three months later she weighed one hundred and thirty-five pounds!

But I have said enough on this so-called Science in which I discover as little Science as Christianity. I only refer to it at all as one, and only one, of the many silly delusions which have grown up from time to time and have demonstrated how infinite is human folly. Joanna Southcott and Mr. Prince had their followers, and judging from what I read lately Mr. Prince has his followers even now. Nor will it do to set down all these things as intentional falsehood and fraud. But some people avail themselves of the folly of others and where intentional fraud exists there is invariably the accompanying desire of sordid gain as its companion.

But more dangerous and more difficult to deal with is the question, when undoubted sincerity introduces the delusion, and the unfortunate patient who describes her pitiable condition as being treated for many diseases for years, may in truth have been really cured by ceasing the profuse swallowing of drugs.

The history of the Christian Church from its earliest beginning contains one long catalogue of heresies, and it is no new thing that great spiritual powers have been self-proclaimed by very many impostors. But the patois of fraud—and I believe I have used here before that phrase—lurks in the sort of patchwork of scriptural language. Poets and saints have alike used figurative phrases as "a death unto sin, and a life unto righteousness." "There is no death—what seems so is transition"—Longfellow. But no one really misunderstands

what is meant. But what does Mrs. Eddy mean when she uses such a phrase to prove the efficacy of Christian Science to ward off death and sickness?

Do not let us underrate the effect of such teaching as I have been describing, the delusion itself is not its worst effect; see what it leads to even with able and learned men.

I am going to quote what has been said by a learned professor. I feel the respect his learning demands, but to agree with him in matters of revelation is to make our reason the standard and measure of the doctrines revealed to us through apostles, to contend that their doctrines should be such as to carry with them their own justification, to reject them if they come into conflict with our own existing stock of knowledge, and thus to accept a rationalistic spirit in the acknowledgment of faith—for faith is in its very nature the acceptance of what our reason cannot reach simply and absolutely upon testimony.

This is what the professor in question has done. His own mind is the measure of what he thinks God must be, and here is what he says:—

“The line of least resistance then as it seems to me both in theology and in philosophy is to accept along with the superhuman consciousness the notion that it is not all-embracing, the notion, in other words, that there is a God, but that He is finite either in power or in knowledge, or in both at once.”

Alas! is this the conclusion—the Christian Hope, the Christian Faith. The idea of compromise on such a subject. At all events, I hope that in this Institute we shall not recognise anything but the faith once delivered to the saints.

488TH ORDINARY GENERAL MEETING.

MONDAY, DECEMBER 7TH, 1908.

GENERAL J. G. HALLIDAY IN THE CHAIR.

The Minutes of the previous Meeting were read and confirmed and the election of the following candidates confirmed :—

MEMBERS.—E. W. Maunder, F.R.A.S., Superintendent of the Solar Department, Royal Observatory, Greenwich; the Rev. Father John Gerard, S.J., F.L.S., B.A.; H. Charlewood Turner, Esq., M.A. (Camb.), Secretary.

LIFE ASSOCIATE.—A. W. Oke, Esq., B.A., LL.M., F.G.S., F.L.S.

ASSOCIATES.—F. Gilbertson, Esq., B.A. (Camb.); J. C. McMurdo Given, Esq., M.D., M.R.C.P.; Mrs. J. E. Hendley; Miss A. M. Hodgkin.

The following paper was read by the Author :—

GENEVA AND CHAMOUNIX HALF A CENTURY AGO AND TO-DAY. (*Notes of a Recent Visit.*) By Professor EDWARD HULL, LL.D., F.R.S. (Vice-President).

(*With lantern views.*)

INTRODUCTION.—*Visit to Geneva, 1852.*—It is about half a century since I first stood on the banks of the Mer de Glace at Chamounix and had a view of Mont Blanc. Early in my college days I had become acquainted with the glories of the Alps, and was fired with ambition to visit Switzerland and its wonderful snowy mountains and glaciers. I had read and studied that charming book, *Norway and its Glaciers*, by Professor James Forbes, as also the explorations of Agassiz, Charpentier and De Saussure amongst the Alpine Glaciers as related by Lyell; but it was to Forbes that I was chiefly indebted for what I know of the structure and movement of glacier ice, as it is to his observations conducted on the Mer de Glace of Chamounix through several successive seasons, with the aid of his faithful attendant and guide, Auguste Balmat, that we are acquainted with the laws which regulate the motion of glacier ice; observations which were afterwards repeated by Tyndall.

Therefore, on the first opportunity that presented itself after my appointment to the staff of the Geological Survey of Great

Britain, and having scraped together sufficient funds, which with great self-denial were sufficient to carry me through my journey—that I left England for Switzerland. I crossed over to Paris, where I stayed only one night, and next day took the train for Dôle, beyond which the railway did not then extend. Arriving at Dôle by midnight, I left the train and presented myself at the office of the diligence demanding a seat for Geneva. What was my consternation when I was informed that the coach was “full up,” as all the seats had been booked beforehand in Paris! I was told that I must wait for the coach next day; but might not that coach be just as full as the one about to start? In this dilemma I appealed to the conductor to get me through somehow, and he agreed for the sum of 20 francs, and at the risk of dismissal if discovered, to make me a den on the coach top amidst the luggage, where I could lie covered over by the tarpaulin, but open in front.

First view of the Alps.—To this proposal I had to assent, and in this position I made the journey to Geneva, of about nine or ten hours, as part of the baggage. I need hardly say the position was not quite as comfortable as that of a first-class compartment of a railway train at the present day!

But I was not without a reward which is denied to persons so travelling to-day. After crossing several beautiful hills and valleys of the Jura range, we at length came to a point in the road where all the passengers were allowed to descend and remain for some minutes. It was the summit of a ridge from which the road commenced to descend into the great Valley of Geneva. From this point the view commanded the valley and the Lake of Geneva stretching from end to end; beyond which was seen the range of the Alps rising in three successive tiers. First, that of the forests, green with verdure. Above this extended the dark band consisting of naked rock, contrasting with that of the forest below and with that of the snows above; and surmounting this region was that of the snowy Alps, its lower limit clearly marked off as seen from my point of vantage, and rising high into the pure vault of heaven; so pure and ethereal as to give the idea that it was a celestial vision rather than as part of the terrestrial world; and finally, rising from the centre was the white dome of Mont Blanc, the highest point of Europe. This magnificent range of mountain scenery stretched from end to end a distance of over fifty miles.

This first view of the High Alps has remained impressed on my memory ever since, and for the time the discomforts of my journey were forgotten. Needless to say, the view is now

seldom seen by travellers, as the coach has given place to the railway, from which only slight glimpses of the High Alps are to be obtained.

First visit to the Mer de Glace.—Arriving at the beautiful city of Geneva, I did not remain there more than two or three days. My goal was the Mer de Glace and Chamounix, and to that I pushed on by diligence. At that time there was no railway; it is otherwise now, and after a long day's journey I found myself in the little village at the foot of Mont Blanc. Next day I ascended the pine-clad slopes to the ch[^]teau of Montanvert, and at length stood on the edge of the great glacier. A wonderful and beauteous sea of ice, fissured by crevasses, and bounded by lofty cliffs terminating often in sharp peaks, and lying at their feet were huge moraines of broken rock and *d^ebris* fallen from the cliffs above. It was a weird and awful sight, as no living creature was visible from where I stood. But I was not alone. I sat down on a boulder to eat the little store of biscuits and fruit I had brought with me, and presently I was joined by a noble hound—possibly a St. Bernard—who made up to my side in a friendly way, and I returned his civility by sharing with him my lunch. How he came to be there or whence he came I never discovered, but he remained with me for the rest of the day, and having accompanied me down to Chamounix in the evening he then disappeared, doubtless satisfied with having fulfilled his friendly office of guide, companion, and protector.

Second visit to Chamounix and the Mer de Glace, 1908.—Having now finished the narrative of my first visit, I proceed to make some observations on the Mer de Glace of to-day, in order to illustrate the changes which have occurred within the past half century. Chamounix itself has greatly changed. Instead of a hamlet in the upper Rhone valley with, perhaps, two or three hotels, it is now a good sized town with numerous hotels, and shops exhibiting photographs of the scenery around, some of the coloured ones being remarkable examples of high art. A handsome English church raises its spire in the centre of the town, and was well filled by a congregation on the Sunday I was there. Instead of the toilsome climb of about 3,000 feet to Montanvert,* a newly-opened narrow gauge railway, worked by steam locomotives, ascends by a winding

* The "H[^]tel d'Angleterre" at Chamounix, at which I stayed, has an elevation of 1,000 m[^]tres (3,280 feet) above the level of the sea, and lies at the base of Mont Blanc, the summit of which is conspicuous from the front of the building.

path through the forest of pines which clothes the side of the mountain; and as several trains ascend and descend during the day, one may see from below two trains slowly wending their way, one far above the other on the side of the mountain, either in the same or opposite direction. The upper end of the line approaching Montanvert is still incomplete, and will scarcely be ready for another year; so the traveller has to climb some distance on foot in order to reach the platform on which is built the huge, unsightly hotel of Montanvert, from which, however, a fine view of the Mer de Glace in the valley below is obtained.*

The Mer de Glace as seen to-day.—On coming in sight of the Mer de Glace from my commanding position, which included the whole of the central portion from the base of Takul downwards almost to the extremity of the glacier, I was surprised and not a little disconcerted by its aspect.† As compared with its appearance on my first visit (judging, of course, from memory) the whole mass of the glacier seemed to have shrunk in volume, and its surface to be defaced by a promiscuous covering of dust, gravel and boulders, causing it to appear very different from the generally clear and clean surface of the ice, with a well-defined central moraine of large blocks of granite ranging down from the cliffs of Takul above. This shrinkage was very perceptible along the sides of the glacier, where the edge of the ice had shrunk away from the lateral moraines which marked its former limits. The lower end of the glacier seemed also to have receded to a higher level than that at which it stood at my first visit, when it stretched farther downwards towards the Arveiron Valley. The result of all this was disappointment, not entirely dissipated by the spectacle of hundreds of visitors scrambling over the ice, in contrast to the solitude which attended my first visit. Aware, however, that appearances are sometimes deceptive, I resolved to make further enquiry on my return to Chamounix regarding the supposed shrinkage of the Mer de Glace.

Visit to Mons. J. Vallot.—On returning to Chamounix I was advised to consult Mons. J. Vallot, the Director of the observatory of Mont Blanc, and on my calling at his house a day or two

* Here a flat slab of porcelain has been set up by the Club Alpin Français, on which is engraved, Altitude 1,909 mètres, lat. N. 51° 03' 72" long. E. 5° 09'.

† Takul is the name given to the lofty cliffs which rise from the glacier at the point where the two arms of the Mer de Glace unite (see fig. p. 22).

after, I was most kindly received, and furnished with details extending over twenty-five years of observation, which completely verified my conclusions regarding the shrinkage, not only of the Mer de Glace, but of all the glaciers of the Alps of Savoy.

Mons. J. Vallot's observations of the rate of motion of the ice of the Mer de Glace.—This may be the place to give some account of the results arrived at by this authority from his observations conducted systematically for several years regarding the movement of the ice of the Mer de Glace.* These observations were conducted between the years 1891 and 1899 in an elaborate manner by using the blocks of rock lying on the surface of the ice or placed in position. Taking a straight line across from side to side at four stations in the following order—

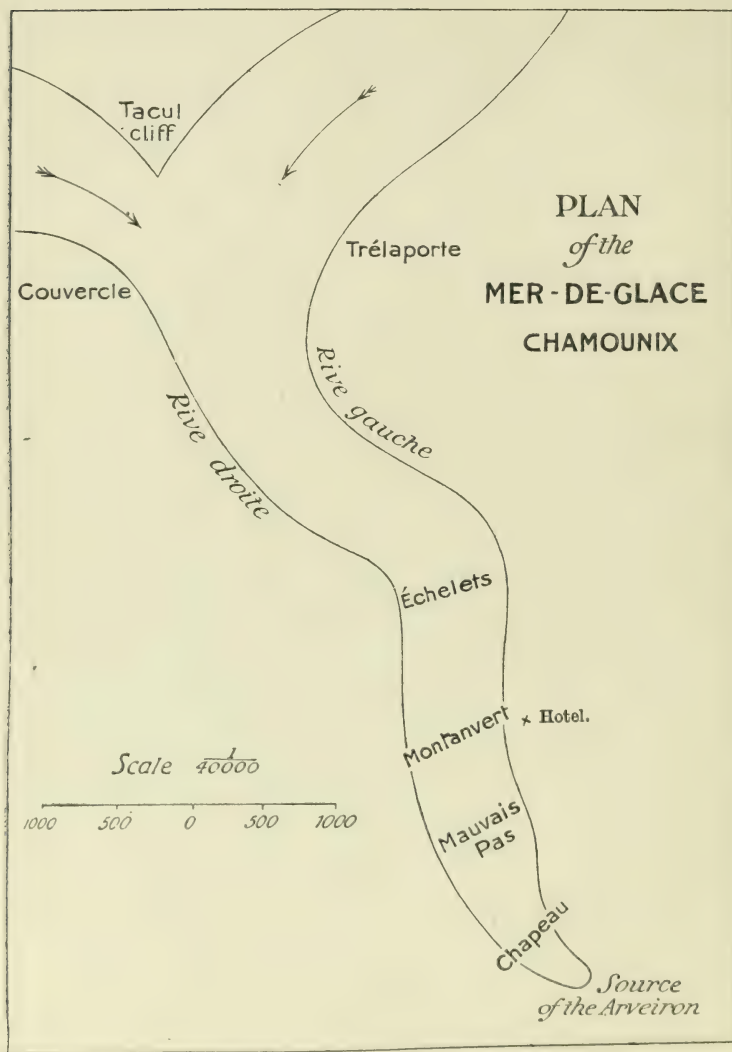
- No. 1, Echelets, the highest of the stations,
- „ 2, Montanvert, about 1,000 mètres lower,
- „ 3, Mauvais-Pas, next lower down,
- „ 4, Chapeau, near the lower end,

M. Vallot selected, or placed in position, a line of stones on which to paint the numbers 1, 2, 3, etc., from side to side; and by visiting the glacier from time to time, and measuring the positions of each stone as it had advanced from the starting point marked on the plan, he was able to determine its rate of motion downwards and its relative rate as regards those of its neighbours. This laborious process was somewhat different from that adopted by Professor James Forbes with the assistance of his able assistant, Auguste Balmat, many years previously. But the same general result regarding the rate of motion of the glacier was arrived at in both cases; that is to say, the motion is similar to that of a river flowing down its bed, which is most rapid at the centre and least at the sides.† Mons. Vallot holds that the difference in the rate of movement at different points is caused by the difference in the form of the bed of the glacier, also its breadth, depth and its inclination. This is considerable when it was found that between two points one kilomètre‡ distant from each other, namely, between Mauvais-Pas and Chapeau, the rate varied from 34·2 to 43·4 mètres during the year 1893. The following table gives the results of the observations during nine years:—

* *Annales de L'Observatoire Météorologique du Mont Blanc.* By J. Vallot, tomes iv, v (Paris, 1900).

† Similar results were arrived at by Agassiz from observations on the Unteraar Glacier.

‡ 1,093·6 yards.



(From a plate by Mons. Vallot.)

Rate of motion of the Mer de Glace.
(Speed in centimètres.)

YEARS.	ÉCHELETS.		MONTANVERT.		MAUVAIS-PAS.		CHAPEAU.	
	Rate.	Slope.	Rate.	Slope.	Rate.	Slope.	Rate.	Slope.
1891-2	39.0	6.2	44.0	11.5	36.0	8.4	—	—
1892-3	39.3	5.5	44.1	15.1	35.5	12.4	—	—
1893-4	38.1	2.7	40.6	14.5	34.2	14.6	43.4	50
1894-5	34.0	8.5	32.9	15.2	30.7	10.8	—	—
1895-6	31.7	10.0	28.9	10.7	30.8	38.7	—	—
1896-7	32.6	10.8	28.3	9.7	30.8	38.7	—	—
1897-8	33.5	7.3	27.7	11.6	31.0	39.6	—	—
1898-9	34.4	7.2	26.3	10.2	—	—	—	—

Amongst other results arrived at by this observer were that the rate of motion of the ice is greatest in summer and least in winter. This is true of all the Alpine glaciers, and has been determined by Streenstrup even regarding the ice of Greenland.

Observations on the "ablation" of the Mer de Glace.—Mons. Vallot has also contributed an interesting "note" to the French Academy on the "ablation" or lowering of the surface of the Mer de Glace during two definite periods, namely, 15 and 57 years, at stages given in the above table:—

(The figures are given in mètres.)*

	Altitude.	Years.	Exact mean.	Approximate in 57 years.
At Échelets ...	1,920	15	11.0	54
„ Montanvert...	1,843	14	13.4	55
„ Mauvais-Pas	1,705	13	19.8	49
„ Chapeau ...	1,550	13	29.5	74

Thus at Échelets, the highest of these stages, the lowering of the surface has been in 15 years 36.08 feet, and in 57 years 177.12 feet; while at Chapeau, the lowest of the stages, the fall

* Dated June 22nd, 1908; the figures are in mètres

has been in 13 years 96·76 and in 57 years 242·72 feet. These are the alterations of level since 1850 within the memory of the present inhabitants. But Mons. Vallot goes a step farther back and compares the present levels with those of the period of maximum high level of the Glacial period, showing enormous shrinkage since that epoch. He has observed the glaciated rocks at the foot of the Aiguille du Dru and at the head of Trélaporte; positions higher up than those above-named on the side of the Mer de Glace. There can be no doubt the ice reached these glaciated rocks, and has left its well-recognized marks and polished surface, and these he finds to be 400 mètres (1,312 feet) higher than the actual moraines now at the base of the cliffs. At this altitude the glacier has left no lateral moraines analogous to those of the present day, and he concludes that the Glacial Epoch does not present so long a period of equilibrium as is generally supposed. He infers, on the contrary, that the rise and fall of the ice was comparatively rapid, not allowing time for the formation of a lateral moraine, which can only be accumulated during a prolonged period of tranquillity.

On the above facts M. Vallot remarks:—"When we consider that the life of a man has sufficed to see the *ablation* of 50 mètres of a glacier (that is to say, of one-eighth of the total thickness of 400 mètres) disappear since the Glacial Epoch, one asks if all that has been said regarding the length of that period has not been considerably exaggerated?" But here I would observe that we must recollect that whatever the length of that period may have been it was sufficient to allow of the bed of the Atlantic Ocean being raised to a height of over 6,000 feet above its present level, and the extension of the continental river valleys to that depth below the present surface, and the subsequent subsidence of the sea-bed to about its existing level.*

VISIT TO THE GLACIER DES BOSSENS.—My next visit was to the Glacier des Bossons, which descends from the snows of Mont Blanc and is easily visible from Chamounix. Its valley is clothed in forests of pine, and its lower end disappears beneath the trees, leading one to suppose that it is easily accessible on

* This is on the assumption that the cold of the Glacial Period has been brought about by physical changes such as the elevation of the sea-bed, and adjoining continents, and the consequent diversion of the Gulf Stream, all of which I have endeavoured to show took place in my essay, "Another possible cause of the Glacial Epoch." *Trans. Victoria Institute*, vol. xxxi, p. 141 (1805).

foot from the Clamounix valley, a supposition which is dissipated on trial. There is, in fact, a stiff climb of about 2,000 feet in order to reach the Chalet, where a good view of the glacier is obtained together with needful rest and refreshment. I will not stop to describe this glacier further than to observe that a brief survey of its lateral moraine shows that the ice has here retreated to a considerable extent (perhaps 200 feet) from its former level. Along the top of the moraine large boulders are perched, ready to fall from the slightest movement. These were left when the ice reached that level; but the moraine itself is bare and destitute of vegetation, which apparently has not had time to grow upon its surface since the ice retreated; evidence of the recenticity of the shrinkage. On descending towards the valley of the Arve we passed some huge blocks of granite, left by the glacier when it reached far below its present limits. Some of these must have weighed 100 tons, and are being quarried for building.

Remarkable appearance of Mont Blanc, August 17th, 1908.—Mont Blanc under the setting sun.—When approaching Chamounix the day of our arrival we were favoured by a scene of wondrous beauty which ought not to pass unrecorded. The train was passing about sunset along the Valley of the Rhone bounded on either hand by mountainous heights, when someone exclaimed, "Look at Mont Blanc!" and casting our eyes upwards in the direction indicated we beheld a scene never to be forgotten. The great mountain dome, with some of the adjoining heights and bordering snowfields, seemed to have been converted into a mass of burnished gold, owing to the declining rays of the setting sun which were flooding the heights with their light, but were quite out of sight to us, being intercepted by the intervening heights. This gorgeous scene was fortunately visible from the railway for several minutes, so that we had time to realize its supreme beauty, which words fail to describe. The white fields of snow lit up by the setting sun reflected in all their rich beauty their own resplendent colouring. It was a rare coincidence—the splendour of the sunset, the reflection from the snows, and our own position as observers!

Geneva revisited, 1908.—We may now go back to Geneva, and note the changes which have taken place in this celebrated city within the last half-century. They have been indeed remarkable. At the time of my first visit to the city of Calvin there were no railways, nor, if I recollect, steamboats on its great lake, the only ships being the pretty double-winged

sailing boats; no tram lines through the streets, no turbines for supplying the inhabitants with water and with power for driving tramcars and turning machinery.

Now all is changed except the splendid scenery of the landscape viewed from the banks of Lake Leman, some fine hotels and houses with the cathedral, occupying a commanding position in the upper part of the town. On visiting this church, severely plain and destitute of R.C. decoration, I was startled by seeing the name of John Knox conspicuously posted on a slab in the wall, reminding the visitor that the Scotch Reformer had during those stormy times visited Geneva, and occupied for a while Calvin's pulpit; and in memory of this brotherly visit a very beautiful annex called "the Macchabees" has been erected on the south side, where Presbyterians meet to worship on the Sabbath, according to a ritual closely resembling, if not identical with, that of the Church of Scotland at the present day. "Calvin's Chair," of plain hard oak, stands beneath the elaborately carved pulpit, which replaces the original one of the sixteenth century. The chair is regarded with veneration as a monument of the Reformer. What times of religious fervour were those when the images and ornaments of the Roman worship were pulled down and destroyed, and the bishops and priests were given the choice of accepting the Protestant faith or of quitting their sanctuary for an asylum in France or Italy. In these days of "passive resistance" it is difficult to picture to ourselves the perfervid religious convictions by which Switzerland was swayed from end to end, and which resulted in bringing over to the Protestant faith the cities of Geneva, Lausanne, Zurich, Basle and Berne. But Lucerne and the seven Forest Cantons retained their attachment to the papacy—after a severe struggle between their opposing forces and those of Berne.

The great turbine installation of the Rhone.—When at my first visit I stood by the banks of the Rhone below Geneva, there was probably nothing to intercept the course of the stream as it issued forth from the lake; a pure, ever-flowing sheet of water, which had entered at the upper end of the lake brown and turgid with glacier mud. This mud had subsided in the still waters, and has within the Christian era added an extensive tract of flat alluvial soil as shown by the remains of a Roman fort which once stood on the banks of the lake about a mile above the present margin in the valley of the upper Rhone above Villeneuve. Now, however, half the volume of the river is utilized for turning a grand installation of powerful

machinery in the form of turbines, twenty in number, and each 1,000 h.p., by which the city is supplied with water, electric light and motive power, all in almost unlimited quantity.

There had existed since the year 1837 successive attempts to utilize the waters of the Lower Rhone, but from various causes they were insufficient to supply the demands of an increasing population and prosperous community. But at length, in 1882, a concession was granted by the city of Geneva to the enterprising engineers, MM. Merle d'Aubigny and Turretini, to construct the present powerful works. These turbines were specially designed for the works at Geneva, and were manufactured at Zurich, the great centre of mechanical appliances in Switzerland, by the firm of MM. Escher, Wyss and Co. The force thus obtained operates a proportionate number of powerful dynamos, and is distributed for industrial motive power, as also for lighting and for water supply by centrifugal pumps capable of throwing the water to a height of about 270 feet in the air above the surface of the lake. The total cost of these works to December, 1905, reached 9,964,728 francs (nearly £400,000), a very large sum for a population of about 106,000 souls; but having been once carried out is almost automatic, and is certainly inexpensive to keep going. Nature has given compensation to Switzerland for the absence of coal. Coal-fields are exhaustible, but the supply of water from the snowfields can never fail as long as the present order of nature lasts.

Junction of the Rhone and Arve.—A convenient causeway has been constructed by which the visitor is enabled to stand just over the spot where the pure waters of the Rhone, issuing from the Lake of Geneva, come in contact with the turgid waters of the Arve—a most impressive sight! Between lofty banks of stratified gravel, once the bed of a vast lake of post-Glacial times, these two fine streams move majestically onwards; yet do not their waters commingle. They run side by side for a long distance; but the level of those of the Rhone being somewhat higher than those of the Arve, and their force and velocity greater, the Rhone gradually pushes the Arve towards the opposite bank, and gains the mastery. The difference of level above the junction is shown by the fact that at several places the somewhat open material of which the causeway is formed allows the water of the Rhone to percolate underneath and invade that of the Arve. May we not in this case of the rivers find an illustration of the two great principles which govern mankind and which Scripture clearly unfolds to us, for instance,

in the parable of the wheat and the tares, the principles of good and evil? Like the waters of the Rhone and the Arve they move along side by side, but they refuse to commingle. They are, in fact, constantly at war, each striving for the mastery; but the forces of good and that "make for righteousness" are gaining on those of evil through the spread of Christian light throughout the world, and as we believe will ultimately prevail, when the "knowledge of the glory of the Lord will cover the earth as the waters do the sea."

Literary coincidence between the English and Swiss "Lake Districts."—It is a somewhat curious coincidence that the City and Lake of Geneva has, like the Lake District of England, been the favourite residence of distinguished men of letters. Naturally, men of high intellectual capacity congregate where the beauties of the landscape, the mountains, the lakes and the fruitful vales tend to tranquillize their minds and inspire them with poetic imagery; and in following up this thought the names which suggest themselves at once for the English Lakes are those of Wordsworth, Southey, Ruskin, Harriet Martineau and De Quincey, and for those of Geneva, Calvin, Farel, Beza, Voltaire, Rousseau, Necker, Charpentier, De Saussure, Agassiz, Gibbon, D'Aubigny and others: names which for good or for evil have left their memory for all time. Calvin's greatest work, *Christianæ Religionis Institutio*, "which has shed undying lustre on his name," though issued in Basel (1535) is associated with Geneva, and to the Academy founded by Calvin in 1559 learned French, Italian, German and English emigrants flocked and rendered the city illustrious for learning. Amongst the English we find the names of Spencer, Coxe, Chambers, Bishop Hooper and other divines.*

Geneva as an asylum for persecuted Reformers.—Geneva has had the honour of offering an asylum to the persecuted Reformers of France and other countries during the troublous period of the sixteenth and seventeenth centuries, when in the time of Cromwell, the Duke of Savoy, at the instigation of the Pope, endeavoured to exterminate the Vaudois of the High Alps, which called forth the lines of Milton:—

"Avenge, O Lord, thy martyred saints,

Whose bones lie scattered on the Alpine mountains cold."

and caused the Lord Protector to threaten the Duke of Savoy with his vengeance, by "sending his ships across the Alps"

* *History of the Nations, supra cit.*, p. 287.

unless he withdrew his hand, which he, the Duke, did! And the next important occasion was the massacre of St. Bartholomew's Day in 1572, when thousands of Protestants were ruthlessly murdered in cold blood or had to fly for their lives into Geneva, Zurich and other friendly Swiss towns on the one hand, or to England and Ireland on the other. We are fortunate in now having the details of this foul tragedy laid bare by the researches of a Roman Catholic historian of undisputed eminence. I refer to Lord Acton, late Professor of History to the University of Cambridge,* because I learn there are persons so ashamed of this event that they are inclined to deny that it ever happened; and from the efforts (related by Lord Acton) which were made by the Catholic writers of France to destroy all documents relating to this event, it is clear that they would have gladly blotted out that record from the page of history. The destruction of a million of France's most God-fearing and industrious inhabitants was a loss she has never recovered, and a gain to those countries who opened their doors to the refugees. Retribution was sure to follow, and has followed. Through Zwingli's efforts Switzerland extended the *droit d'asile* to all, and she henceforth followed out her mission as a neutral power. It is the protection so freely given to refugees by Geneva, Zurich, and other Swiss cities that brightens the history of the gloomy reaction period towards the close of the sixteenth century after the death of Calvin, and during the Marian persecution refugees from England found a friendly asylum in these prosperous cities.†

Such were the scenes and impressions which presented themselves during my visit to Switzerland a few weeks since, and about half a century previously. I have not included the beautiful City of Lausanne, which was the point of arrival and departure for our tour; nor the Hotel Gibbon, where the historian is said to have composed his great history of the *Decline and Fall of the Roman Empire*, a work which is in itself a library of information regarding the times to which it refers—to have done so would have unduly extended this paper.

* "The Massacre of St. Bartholomew," in *The History of Freedom*, by Lord Acton (1907), MacMillan and Co. The Pope Gregory XIII. on hearing of the massacre, exclaimed "that it was more agreeable to him than fifty victories of Lepanto, and with his cardinals attended a *Te Deum* in the nearest church in Rome," p. 133-4.

† An admirable account of these times will be found in the volume "Switzerland" of *The Story of the Nations*, by Lina Hug and Richard Stead (Fisher Unwin, 1890). Also, in *The Huguenots*, by S. Smiles (John Murray, 1869).

DISCUSSION.

The CHAIRMAN, in expressing the pleasure with which he and all those present had had in listening to Professor Hull's interesting paper, said that his recollections went back a great deal further even than those of the reader of the paper. In his opinion the modern traveller by railway sustained an enormous loss in missing the view obtained by the old traveller by diligence from the crest of the Jura at such a place as the Col de la Faucile.

Mr. W. H. HUDLESTON, F.R.S., said that the paper was extremely interesting to him, not only because it was in accordance with his own views, but also because it served to remind him of his experiences in Switzerland, which coincided to the very year with these of the author.

Now it so happened that he (the speaker) towards the end of January, 1852, arrived at Geneva in the banquette of a diligence (*summa diligentia*, as they used to say in those days), but clouds and darkness had prevented him from enjoying that famous view. Nevertheless, as he was spending the remainder of the winter at Geneva, there were plenty of opportunities, and he chose one bright frosty day for the ascent of the Col de la Faucile. Surely there is no grander view in Europe. From the snowy foreground of the Jura you look down upon the broad vale of Switzerland with its cities and villages, and above all, its glorious lake, the whole bounded on the opposite side by the still more snowy ranges of the Alps, ever increasing in height until they culminate in the chain of Mont Blanc. Professor Hull had estimated the extent of this view at 50 miles, but he (the speaker) thought that it might possibly be even longer. The only view which could compare with this one is the view from the heights above Baramula, looking across the Vale of Kashmer, with the Wular lake in the middle towards the chain of the central Himalayas. There is considerable analogy between these two celebrated views, and he thought that the Alpine one would lose nothing by comparison with the Himalayan.

He was much interested in the contrast drawn by Professor Hull between the Geneva of to-day and the Geneva of fifty or sixty years ago. From an æsthetic point of view the change was by no means an advantage. In the early fifties Geneva was a very picturesque old town, symmetrical, and for the most part within its fortifications.

These, no doubt, were out of date in a military sense, but added much to the picturesqueness of a compact town, which, as yet, was innocent of tramlines and disfiguring suburbs. Unfortunately, most of the large continental towns had outgrown their pristine symmetry, and presented, nowadays, a somewhat formless mass of buildings—useful, no doubt, but many of them very ugly. The once beautiful city of Naples was a case in point. The great turbine installation of the Rhone, on the other hand, is a real improvement. As regards the junction of the Rhone and the Arve, if Professor Hull had gone a few miles further down he would have found that this union of waters serves to illustrate the saying “that evil communications corrupt manners,” since the mixture ultimately becomes turbid and not unlike green pea soup.

As regards the extension of railway accommodation to Chamounix, no doubt the modern traveller might obtain some increase of comfort, but he would miss many fine points in the valley of the Arve, and especially that magnificent bend of the river in the neighbourhood of the Pont Pélissier, which exceeds in beauty anything to be seen at Chamounix itself. The Savoyards had been somewhat behind the Swiss in constructing Alpine railways, but in order to make up for lost time there had been a talk of a railway up Mont Blanc itself, of which the line to the Montanvert might be regarded as a very small instalment.

When we come to regard the scientific aspects of the paper, we are presented with facts of great interest and value, more especially in respect of the shrinkage of the Mer de Glace. From the observations of Mons. Vallot it would appear that the actual *ablation* amounts to a little short of 200 feet in fifty-seven years at the Montanvert, where the glacier admits of very accurate measurements, as it there runs in a deep rock channel. The shrinkage of the Glacier des Bossons can only be inferred from the present position of the terminal ice with reference to its moraine. It would, however, be somewhat out of place to attempt any comparison with the Glacial Period, when all the valleys were completely filled with ice, and even the great vale of Switzerland so full that the granite of the Alps was deposited on the limestones of the Jura. Rather it would appear that the changes indicated by the shrinkage of the Mer de Glace and other Alpine glaciers may be regarded as forming part of an alternate rise and fall which has

been going on for several centuries. Numerous writers have testified to the remarkable desiccation which has been going on of late in Central Asia, yet it appears from historic records that there were times when the reverse was the case. Nevertheless, on the whole, it does seem that a dry period has set in throughout these regions, and this has affected the glaciers in the Himalayas to a certain extent. The Geological Survey of India has lately been engaged in a preliminary survey, and it has been found that, while the glaciers of the Karakorum ranges give somewhat varying results, those of the Ganges basin in Kumade show very decided signs of shrinkage. If we are inclined, as regards Switzerland, to speculate on the causes which produce this apparent rise and fall the question becomes one of meteorology. We may believe there has been a deficient rainfall in the Alps during the last sixty years, or, secondly, that there has been a slight increase in temperature, especially in summer. It is for the meteorologists of Geneva and elsewhere to help us to solve this problem.

Some notes contributed by Professor Roget of Geneva were then read by the SECRETARY: these notes are printed at the end of the discussion.

Professor ORCHARD remarked that probably many present had little idea when they came to the meeting how very interesting the subject of geology can be made when treated in the way in which it had been treated that afternoon. In this connection the name of W. H. Hudleston should be coupled with that of Professor Hull in their vote of thanks.

After the discussion a series of lantern slides was exhibited, in illustration of the paper.

The meeting terminated with votes of thanks to Professor Hull, the reader of the paper and to the Chairman, General J. G. Halliday.

NOTES ON THE PAPER BY PROFESSOR ROGET OF GENEVA.

Page 17. It is very difficult to connect with any particular name the first correct notions or experiments upon the motion of glacier ice. At the village of Bagnes or Châbles, in canton Valars, may be seen a memorial tablet claiming for one Perraudin the *originality* of

the experiments, observations and analysis thereof later attributed to Charpentier, Agassiz, Tyndall, etc.

Page 20. The quick relative or comparative shrinkage of the Mer de Glace and other glaciers is an effect of the comparatively greater mass and volume of the Mont Blanc range. The inner temperature of a mountain or mountain-group *grows* in some proportion to its mass and volume. So general causes of shrinkage must tell most upon the Mont Blanc range, the factor of greater internal heat being super-added. The principal cause of shrinkage is the increasing dryness of the atmosphere consequent upon 300 years of general Alpine deforestation. An air loaded with moisture deposits its moisture in the shape of ice crystals and prisms upon any surface the temperature of which is under freezing point, and if those surfaces are conveniently situated to preserve those icicles which are atmosphere-born and grow day by day to be acral reefs, the foundation is laid for a glacier.

Page 21. Glaciers move at a quicker rate along their centre-line because the ice along this line is pressed down by lateral pressure, the result of the gravity of side masses, and of the resistance of the rock-bed which these masses cannot press back outwardly, ice being an elastic body.

Page 22. I connect with this page, which contains a most instructive sketch of the Mer de Glace, a description of the influence of *vegetation* and *climate* upon the growth and the shrinkage of glacier-areas, in the Alps only.

The species of pine, popularly called the *arolle*, has given its name to the famous Alpine resort, Arolla. This tree is now almost extinct and the few remaining forests of arolles are as much as possible protected against destruction. At one time these forests extended over extremely vast mountain areas, and if their remains are now so difficult to preserve, it is simply because they have exhausted the soil of the Alps, so far as nourishment suited for that type of pine is concerned.

The arolle forest has a luxuriant undergrowth; thick and tall mosses cover a damp and thick layer of soil. There are many shrubs growing out of that moss in thick tangled masses, and the general moisture is such that peaty and marshy patches are most frequent. In prehistoric times—and these practically reach, for Switzerland, down to the days of Julius Cæsar—the Swiss climate was characteristically damp and warm; if only a fraction of a degree, on an average, damper and warmer than nowadays. The forest belt extended from lake and river banks to the height of from six to seven thousand feet upon the Alpine slopes. It constituted, in its protected subsoil, in its mosses, marshes and shrub tangle, in its continuous tree growth, a vast and ever refilled reservoir of rain and snow water. Vapours and fog rose from it in much larger quantities than at present. During the long periods of wind-

stillness which characterize the Alpine climate in winter to the present day, these fogs rested upon the belt of everlasting snow above the forest line, fed it, kept it much broader than it is now, and brought it down much nearer to the forest edge. The quantity of snow-ice thus accumulated during those distant ages was bound to diminish in a ratio proportionate to the reduction of the ancient forest area. What produces glacier-ice is an accumulation of moisture in an atmosphere which is below freezing-point.

Page 23. Glaciers move at a quicker rate in summer because their reaches are then more uniformly subjected to a temperature above freezing-point of the air. That increase of speed appears to be in exact proportion to the shrinkage, and corresponds to a release from pressure all over the mass, a consequence of the melting process (both static and mechanical), non-existent in winter. Any deep sub-glacial melting which may take place in winter is immediately cancelled, as a mechanical agent, by re-freezing on reaching the air.

Page 24. Leaving aside the universal geological agents, it is clear that the shrinkage and growth of glaciers in the Alps is partly the result of man's interference with nature. The observations of M. Vallot, as to the probable speed of glacier shrinkage within historical times, have, for a complement, similar conclusions as to the rapidity of glacier growth. In illustration of this oscillation we have the local tradition, for instance, as to the Theodul pass from Zermatt into Italy. The people say it was open to horse traffic 1,300 years ago. That it had long ceased to be thus open was so evident that the contrary statement became incredible. But, this year, the pendulum has so far swung back, that mules have been led across the iced watershed with success.

I assign that swinging of the pendulum entirely to the action of man. The Alps entered within the area of civilization in the times of Julius Caesar, 58 B.C. Switzerland was then, from times immemorial, a forest land. A process of systematic deforestation began and developed during 500 years.

The climate, from a comparatively damp climate, became a comparatively dry climate, and as the process progressed, its ratio of effectiveness grew naturally at a much quicker pace. The glacier world shrank enormously, and Italy was laid open to the incursions of northerners. These northerners destroyed civilization in the Alps and elsewhere, as we all know (from the Channel, from the Danube, from the Rhine, to the Mediterranean). From A.D. 500 to A.D. 800 or 900, an enormous spontaneous re-forestation of the Alps took place, in the absence of man, in the absence of all commerce and industry. The glacier world re-gained the lost ground, and most of the passes were closed up again. The economic history of the Swiss people makes its influence felt next.

From the fifteenth century, they drove back, unceasingly, the

forest. The process is now so complete that *artificial* re-afforestation has become usual. The glacier world, too, has been driven back with the forest to within its limits in the latter centuries of the Roman Empire.

It is quite possible that the Aletsch glacier has not yet shrunk back to its size in the Roman days. There is no reason to deny that at one time the cattle which now cross it on the ice may have passed through a continuous forest from one side of the valley to the other.

REPLY BY THE AUTHOR.

The communications by Mr. Hudleston and Professor Roget form a valuable addition to my paper. I quite agree with the former, that the shrinkage of the glaciers is mainly due to meteorological causes, and these, again, to disafforesting of the mountain slopes. When the surface of the ground has been deprived of the protection of trees, the radiation of heat tends to disperse the clouds and reduce the rainfall; on the other hand the same process causes the rain to flow down rapidly and suddenly to raise the rivers; and it is owing to this cause that in recent times the rivers descending from the Alps have caused inundations of the plains of Northern Italy.

I cannot agree with Professor Roget in his explanation of the differential movement of the central portion of the glacier as compared with that of its sides. The true explanation is, as it seems to me, that like a river flowing along its bed—the friction of the sides of the glacier against its basin retards the motion, whereas along the centre this retarding agency is absent, and the ice drags away from its sides, causing the crevasses to run upwards this is generally recognized.

*489TH ORDINARY GENERAL MEETING.

MONDAY, JANUARY 4TH, 1909.

D. HOWARD, ESQ., D.L., F.C.S., F.I.C. (VICE-PRESIDENT),
IN THE CHAIR.

The Minutes of the previous Meeting were read and confirmed.

J. W. Thirtle, Esq., LL.D., M.R.A.S., was elected a Member, and W. Dale, Esq., F.S.A., F.G.S., Andrew P. Derr, Esq., M.A., The Rev. Professor Heckler, Miss A. E. Hemming, John Schwartz, Esq., Junr., The Rev. R. C. Turner, M.A., A. C. Turner, Esq., M.A., Trinity College, Cambridge, were elected Associates of the Institute.

The following paper was then read by the author:—

A COUNTRY TOWN OF LYCAONIA. A Description of the Conditions of Christian Life under the Eastern Empire.
By Professor Sir WILLIAM M. RAMSAY, F.R.S., D.C.L.
Aberdeen University.

MY subject is an attempt to set before you some slight picture of the main facts in the life of a country town in the centre of Anatolia in the province called in ancient time Lycaonia, during the Byzantine Empire. Now we read a great deal in books, in ancient history, and in the history of the Church about that period, but historians concern themselves chiefly with great men, the great religious leaders, generals, and statesmen; with the rarest exceptions we find nothing whatsoever with regard to the practical facts of life among the common people in that country during the period when these great men were living and working. There is some literary material, which has still to be collected, with regard to the life of that period in the private letters of Basil and other great men, which give a great deal of material for the facts of ordinary life. The ordinary people made it possible for Churchmen to exercise their leading power, for generals to have armies to conduct to victory or defeat; and without the knowledge of their common life, a knowledge of history becomes

one-sided and misleading in the highest degree. We want therefore to know something of the common people, the way they live, their surroundings, their views of life, and how far they were affected by the great Church leaders, generals and statesmen.

The question may be asked with regard to the Byzantine Empire; Is it worth while to take up our time in making out some picture of a period rightly regarded as a period of decay in the history of the world? There is no doubt that Gibbons' title, *The Rise and Fall of the Roman Empire*, is correct. The fall was in great measure due to the pressure of what was going on in the Byzantine Empire, that is in Eastern Europe and Western Asia. Two remarks will bring out the importance of life in the Byzantine Empire.

In the first place it was the point of contact of the East and West. Now at the point of contact of East and West has always lain the central point in the movement of the world. Sometimes this point seems to lose its importance, and the centre of movement seems to shift to Europe, or even America. This, however, is only for a time, and we always come back to the inter-relation between Asia and Europe; Europe being taken to designate the whole West and to include America. The Mediterranean Sea was the centre round which the main forces of civilisation inter-acted with one another, and now for a time in the Atlantic Ocean is the point around which all the forces are moving. So in a comparatively near future, though probably none of us will live to see it, the Pacific Ocean may be the theatre across which the most important forces in the development of the world will act upon one another. Now, the fact that the Byzantine Empire was for many centuries the theatre of this inter-action, makes it an important factor in the history of the world.

In the second place, it was the Byzantine Empire that stood between the barbarism overwhelming Asia and the infant civilisation of Europe. There can, humanly speaking, be no doubt that Mahometanism would have swept over Europe had it not been for the staying power of the Byzantine Empire and the strength of Constantinople. One can understand how important it was that the Byzantine Empire was able, in the first place, to maintain itself though with great difficulty against the attack of Mahometanism and after a time to roll back the tide of Mahometanism towards the East, and then after a long time to withstand the Turkish power. In this way the West was given time to strengthen itself for the struggle against Asia.

The intercourse between Asia and Europe has been, in the past, far too much a history of war. In the near future it may be, not a history of war, but of peace, a peaceful inter-action of forces of civilisation.

Now it fell to our lot in 1907 to attempt to form some picture of a small town which lies to the south-east of Anatolia, about fifty miles from Iconia, and eighteen miles from the German Baghdad railway. You have there a great volcanic mountain consisting of two great craters which forms an island of mountain rising directly out of the plain of Lycaonia, 3,500 feet above the general level of the plateau. On the extreme northern side is a little valley which runs in from the open plain and is nearly surrounded by the arms of the mountain, forming an oval plain about three miles long, and a mile and a half to two miles in breadth. The southern half of this little plain and the slope of the mountains which lie immediately above it to the south-west form the site of a city which it was our object to investigate. The city was very picturesque, and was called ordinarily the city of the thousand and one churches. In the East numbers move rapidly, you go on from three to ten, forty to a thousand and one, the main steps of enumeration.

The one striking character of the city, which is a very considerable one, quite one and a half miles in length and breadth at its extreme points, is the large number of churches. There are at any rate, at least thirty. Many travellers have examined in a superficial way, these churches, and given some brief accounts, others have been fascinated by the natural beauty of the scene.

It was our object in the first place to form some idea of the architectural character of the churches. The first question which started us on our investigation was the question of date. To what period should these churches be assigned? The question widened itself very much when we came to practical work. So many other points of interest always present themselves as soon as you get started on any investigation in Asia Minor, and the possibility of investigation is limited by the question of expense. We were only able to scratch the surface and uncover the churches far enough to find out their plan of construction and general relation to each other. Our programme was a double one. How were we to arrange any chronological order in the series of churches? There were another series of at least thirty which lie on the northern outskirts of the mountains. Could we arrange these in order

of construction, and thus acquire some idea of Byzantine architecture, on one single site through a number of centuries?

Secondly, the historical side. What is the history of this city? What name should we give it? and how should we acquire some idea of the people who lived there? What were they doing; what was their feeling towards the great struggle of Mahometanism? Here was a city Christian in the early centuries, now a Mahometan village of about thirty families. How did this change take place?

The architectural subject was taken by Miss Gertrude Bell. I only touch on architectural points so far as they affect the historical position. You cannot isolate architecture from history. You must date these buildings and you cannot date them on grounds of style alone.

It will doubtless become possible after further study to date a Byzantine church roughly from its style to at least a century, but at present this cannot be done. We know too little to venture upon any such method. Other ways of dating the churches have therefore to be found. So we are under the necessity of having recourse to the epigraphical date to find the order of their building. By this method the construction of these churches can be dated from the fourth or fifth to as late as the tenth century.

On the historical side we cannot do without these churches, for churches are almost the only historical monuments in the cities. The church is the centre and remains the only landmark. In the Greek and early Roman periods there are many other public monuments out of which to evolve materials for the historian. In the Byzantine period there are only the churches and remains that lie about the ground around them. Thus it is an interesting fact that in the country of Anatolia you come back again to the state of things at the beginning of Christianity. We find an organised life of men and society where religion and its influence on life is the main feature of the State. Religion and the relation of religion to the life of the community is the one great fact. Between the two great extremes there is the influence of the Greek civilisation over Europe and Western Asia. The Greek had the first idea of the development of individual character, individual freedom and individual property as apart from family life. The separation of property from the family, and making property the appanage for the individual under his own control, comes to us from the Greek idea of freedom developing for the individual. The Greek spirit hardly affected such a town as

this in Central Anatolia, which has hardly any trace of Greek character.

What we find here is, in the first place, the old primitive Anatolian condition. Of the Hittite periods there are now no remains. There is no doubt but that Anatolia was the centre, in the second millennium before Christ, of a great imperial governing power whose influence extended from the borders of the Ægean Sea to the borders of Egypt. Though this empire is mainly associated with the name of the Hittites, I am not at all sure that Anatolia may not be its correct name. We know, however, from the result of the German expedition that the names of all the Hittite kings who were previously recorded for us only in Syrian and Egyptian annals are now found in the capital of the northern parts of Anatolia. On this primitive Anatolia are super-induced the great Roman and Greek remains. Greek and Roman ideas begin to affect the country only when the old ideals had died out. This development seems to be based immediately upon the old Hittite or Anatolian stratum, and after it comes the Turkish invasion.

Now one great thing which disengages itself in this long process and strikes the spectator first of all is the continued degeneration. We have a region which must have been at one period a fertile, delightful place of residence, well cultivated, fortified, with such a civilisation as to be able even in the latest Byzantine period to build up remarkable works of church architecture. Now it has died down to the limits of food supply, and there remains only a wretched little village of thirty families, who are rapidly dying out. As the people grow less and less able to use the opportunity given them, the water supply also disappears, till now there is no food and a great dearth of water. In fact, no water which is not poisoned can be got, except at a distance of about two hours' journey from the village. The inhabitants have habituated themselves to live upon the poisonous water that is kept in the ancient cisterns which have never been cleaned out for three or four hundred years. In ancient times, in contrast to this water supply or dearth of water supply, there were aqueducts to bring the water, which can be traced running under the ground, but they have all fallen away to ruin, and do not bring a drop of water. There were also cisterns of about 50 feet in length and the same in height, and 40 feet in breadth. In these cisterns was stored up water for household purposes. Then for agricultural purposes the water of the tiny streams, which are now entirely dry except during and immediately after the rainfall,

was stored in a series of dams. It is still possible to trace the way in which the water was banked in, and the sediment left by the water in the dams. In modern times agriculture is dependent entirely upon the precarious supply which comes from the heavens in rain. Such changes have occurred since this city was a sanatorium for the country round, presenting in the summer a delightful series of residences surrounded by trees and even a forest. Now you observe in the development of that ancient agricultural system how much knowledge, how much accumulated experience was required, before the natural condition of the steep mountain could be transformed to make it a series of orchards and fertile fields. There was nothing in ancient times which is not there at the present day except the skill and the forethought of men. The people are as industrious now as they were at the beginning, but they have not the knowledge, forethought, or power of adapting means to ends which will give them the needful forethought. We found ten or twelve kinds of trees which have gone back from a cultivated state to a state of wildness and nature.

It was the ancient religion that taught the people how to act, and gave them a series of rules through the cycle of culture. It was this religion which created the civilisation, agriculture and comfort which once existed in the mountain region, but has now entirely disappeared.

With regard to that early Hittite or Anatolian period, the monuments which we find are all of the highest character.

At the peak of the mountain where there are now two churches and a monastery, the latter merely an establishment to keep up the services in the church, there remains still a passage cut in the rock just underneath the north side, and two Hittite inscriptions. All trace of the idolater had disappeared, but the remains of the inscriptions show that there was one of the places on the mountain top, the high places, which are known to have been the sanctuaries of the primitive religion. The churches represent a Christian transformation of the original pagan sacred place.

In the second place there is an outlying fort on the north-west side. A little hill rises 400 feet out of the plain ground, crowned by a little fortress, on the gate of which is a Hittite inscription in hieroglyphics. A pinnacle of rock standing out about forty feet from the hill is carved in the form of a chair, on which is inscribed the form of a god and of a lamb. These two monuments alone are sufficient to show that this was a centre of the Anatolian or Hittite civilisation, which lasted through the

Greek and early Roman time, gradually modifying itself, but only really changing its character in the beginning of the Christian period.

Now take the position of the Christians in this city in the fourth century after Christ; there were the heirs to slaves, the agriculturists, etc., and all the benefits which had been gained for them through the influence of the old religion and the ancient religious belief had been formed into part of the nature of the people. I do not think that it would be right that the Christian religion should eradicate the old *idea* absolutely. The paganisation of Christianity is the adaptation of old ideas, many of which are in themselves right and good, and no person who has taken part in the German celebration of Christmas, and observed the old pagan ceremony of the Christmas tree, can imagine that I speak of a process which is in itself entirely wrong. There was such a process going on in Lycaonia; the deity or goddess who had taught all the arts on which life depended to mankind had become an inalienable part in the national mind, temper, and character. Through the influence of the old idea of the mother goddess there was that in the mind of the Anatolians which we have to take into account, the idea of the divine nature of the mother, nurse, protector, guide and teacher.

In the fourth and following centuries you find a series of facts. In the first place there are the church buildings. Now, exactly in accordance with the old condition, the church building is the centre of religious life. In the church at Tyre, which was built to take the place of one destroyed in the persecution of Diocletian, this is plainly seen. We must understand that in the Eastern Church generally, the church is the centre of municipal life, and that this condition has its origin in times long before the Christian era. There are hints sufficient just to show the beauty of the churches, and what was the reason why there existed within the walls such charming surroundings. One might pursue to a considerable length this topic of the Christian Church being the centre of this Byzantine life. I want to hurry on to the next. I must simply assume now that the Church and ecclesiastical buildings are the centre of the town life, the sum of the town, and the social life of the community as a whole.

Next we want to know what was the development of this country town in the terrible strife of the long wars against the barbarians of Asia, and especially against the Mahometan. It is not that I regard Mahometanism as necessarily a barbarian

religion, but circumstances have made Mahometanism a centre of Western barbarism. It was a central power which ravaged the civilised town. We are accustomed to think that the weakness of the Byzantine Empire lay in the fact that the unarmed people was guarded by a professional army. The population of clergy and tradesmen, entirely untrained to war, and unsuited to contend for themselves and to defend their homes against the barbarian armies, looked entirely to the defence of the soldiery. The soldiery was mismanaged in the decay of the Empire. When this was the case the little rustic town adapted itself to the changed conditions.

We find the proof that the Church did adapt itself to the new situation and surroundings. The churches are our main historical authority. They show the close relation which there was between the people and the defences. There is an imperial church built to a citizen who died in the war, another to one who had endured many wounds, another to a general.

The largest and most magnificent church in the whole town was decorated and painted by a general who was monk, presbyter, and eponimus, which shows the influence of Christianity though diluted and watered down. The fifth church is dedicated to a tribune, that is an officer. So taking these evidences together you have a conception of a Church which marshalls the people, and has tribunes decorating and adorning churches. The angle of the fortifications are made by the churches. The church forms the corner-stone in the actual defences of the city. In the upper city monasteries make part of the lines of defence, and the little hillocks immediately round, forming part of the defence, are each crowned by a church. In all this we see that the church is used as a defence against the Mahometan.

Then when one remembers from literature the facts of the late defence against the Turks, we do know that in the case of Philadelphia there was in the fourteenth century after Christ a town which, though left isolated for fifty or sixty years, defended itself against the Turks, and finally fell only because it had to yield to a combined army of Byzantine imperial forces, and subject Turks. It was somewhat different in Smyrna; there the defence was conducted by Europeans, the Knights of St. John, and was not purely national.

Finally we come down to the transition from the Christian period to the Turkish. After the Anatolian invasion had been rolled back once again to the limits of the East, a new invasion of the Turks began in 1070, and this little town was in the

track and must have passed in 1072 under Turkish rule. Later it was fortified by a Christian people, and though the relation between the two was not entirely friendly, there is no reason to think that it was entirely hostile. The Sultans tried as much as was in their power to maintain the Christian customs and Christian people. The hostility shows itself inasmuch as each part is defended by separate fortifications. A new town was made to defend this lower town, and in the south-west corner is one of the old churches—now the Imperial Church, the Orthodox Eastern Church. We gather from this evidence that the Church was very much closer to the hearts of the people than the Empire which was too far off. It was the Church that stood so close to the people, and guided and taught them. At the same time the price had to be paid, and a good deal of the old character of the Orthodox Church was sacrificed as it adapted itself to the character of the people. The power of writing became as rare in the East as it was in the West in the dark ages. Even in the fifth century when one bishop attended the Council held at Ephesus in 449, to determine the views of the Universal Church, he was obliged to append his mark, and get his name penned by another person, as he did not know his letters! When even a bishop cannot write his name, we can gather what was the ignorance of the people. The inscriptions on the churches are the work of an uneducated people.

I will just conclude by recalling to your minds the fact that this church whose history we have been following in two or three isolated moments,—this oriental church is not completely dead or lost, it lives as a religion of slaves, and may and will revive among the people as education is restored. The deterioration is marked not only by the want of education, and means of writing, but in the architecture. The church architecture down to the Turkish conquest continued to be in the good old style, the plans excellent, but the work carried out hastily. There is no love shown by the workman, he is building a church, and that is all; there is no love for making the church as beautiful as possible. The later churches produce the impression of a decade of slaves and an epoch of ignorance, and gradually as you get further into the period of slavery, the Byzantine architecture really disappears, and in modern times there are only the churches of an enslaved race.

DISCUSSION.

The CHAIRMAN having declared the discussion open :

Lieut.-Col. G. MACKINLAY said that all were greatly obliged to the lecturer for his most instructive account of Early Anatolian Christianity. No one who heard of the Mother Goddess, the protectress of the agriculturists of Asia Minor, could fail to be put in mind of Diana of the Ephesians, Acts xix, 28. (Artemis in Greek.)

Might it not be said that the worship of the Virgin Mary had its origin in Asia Minor, and was directly traceable to the adoration of Artemis ?

Professor Sir W. M. RAMSAY replied that it was undoubtedly true that this Virgin worship or Mariolatry was to be found in Asia Minor at a very early date, and, indeed, that it was at an Ephesian Council that it became part of the dogma of the Church. It was interesting to observe that there was too, in Anatolia, a pilgrimage in honour of the Virgin Mother of God which was actually made to an ancient shrine of Artemis the great goddess ; and that this pilgrimage continued even after the population had ceased to be definitely Christian. But the doctrine of the Θεοτοκος was more wide-spreading and was, indeed, part of the humanising influence of religion in almost all countries. In the Christian churches its influence was of varying strength. He himself belonged to a church which was as extreme in exclusion of this influence as the Roman Church, on the other hand, in upholding it. But he thought that he could not be justified in condemning it for that reason. In regard to the actual origin of the belief and doctrine he thought that Egypt contended with Anatolia for first place.

Dr. A. T. SCHOFIELD said that it was extremely interesting to note the connection between the church and civic life and to see how definitely the one became a part of the other whether organised for development or defence. He thought that they might observe some connection between the Roman word Curia, the Council of the Roman city, and the Greek Κύριος. He would draw particular attention to the feast of the Curia, a central festival of civic life, and the Lord's Supper, the central festival of the Christian life. It

would be interesting if Professor Ramsay could trace the connection between Roman life and Church life, and especially the remarkable passage in the “*διδάχη, ἡ ἡμερὰ τῇ κυριακῇ τῶν κυρίων*,” the day of the Curia of the Lord.

Professor Sir W. M. RAMSAY said that he took the view that the church communities had been in the habit of looking upon themselves as cities even in the first century. For instance, the letter to the seven churches is the letter to the seven cities. The Christians in Thyatira were looked upon as being the true city of Thyatira. This idea of the Church and the city as one doubtless had a strong and abiding influence on both Eastern and Western Christianity.

Professor LANGHORNE ORCHARD thought Sir W. Ramsay would concur that the worship of the Mother-goddess went back earlier than Ephesus.

This was not the first time they had been given the pleasure of a paper by Sir William, and they hoped it would not be the last. One and all they thanked him. He had led them, as personally-conducted tourists, to far-off Anatolia, and down the centuries to that Byzantine period commonly so little known. The paper especially emphasised two facts; the one was the importance of cultivating in a people the love of liberty, of freedom, the other was that religion is the supreme factor in civic and communal life. According to the purity of the religion and the value attached to it, is the purity and prosperity of the people's life; if the religion decay, that life will decay. It were well to bear this in mind in face of the present conflict of opinion in regard to national education. Education without religion is a maimed and truncated thing. It is worse. To educate the head without educating the heart; to neglect a child's character while fostering his ability; is to train him to be a curse to the country which has shirked its responsibility and has betrayed its trust.

490TH ORDINARY MEETING

MONDAY, JANUARY 18TH, 1909.

DAVID HOWARD, ESQ., D.L., F.C.S., F.I.C. (VICE-PRESIDENT),
IN THE CHAIR.

The Minutes of the previous Meeting having been read and confirmed, the following gentlemen were then elected as Associates of the Victoria Institute :—

The Rev. Hamilton Ashwin, LL.D. (T.C.D.), the Lecture House, Dedham, Colchester.

The Rev. Edward Godfrey Ashwin, M.A. (Camb.), Rector of Earl Stonham, Stowmarket, Suffolk.

The following paper was then read by the Author :—

SCIENCE AND THE UNSEEN WORLD. By A. T. SCHOFIELD, M.D.

UNDER this title I propose very briefly first of all to consider the relative spheres of Science and Revelation, and secondly to pass in review various phenomena dependent on the forces of the unseen world with which we are as yet but little acquainted.

In the first place then, I would say that the very existence and possibility of science, equally with that of the scientific man, postulates God.

The whole of science and its researches in every branch are based upon the hypothesis that nature is intelligible, *i.e.*, has been constructed by mind. If nature were the result of the caprice of an irrational being, such as that of claw marks on a tree, or the scratchings of a cat on a wall, no science would be possible.

All science, truly so called, is a sincere attempt to decipher the handwriting of the Almighty on the Universe, and to discern the design and purpose that may underlie it all ; but it proceeds on the belief that the writing is there, and that purpose and design are facts. Design may equally be shown in constructing the

thing (if a natural product) or in inventing a machine to make it (if machine made). In *both* cases the article is the product of mind and not of a machine, only in the first case it is primarily, and in the second, secondarily produced. So if all nature is intelligible and science reveals plan and order everywhere, a Mind must have produced it, and a Mind great enough to be capable of such a work. This line of argument is doubtless familiar enough to this Institute, but while I do not dwell upon it, it is well to call to mind at the outset that the very existence and possibility of science postulates the existence of God.

Nature necessitates the concept of an omniscient mind; or as Lord Kelvin has put it, "Science, if you think truly, forces to a belief in God."

"There remains," says Herbert Spencer, "the one absolute certainty that we are ever in the presence of an Infinite and Eternal energy from which all things proceed."

Science, however, is limited in its investigations. It is mainly a study of effects. It stops short at first causes as before an impenetrable barrier. Its sphere is the study of what exists, but it knows nothing of the ultimate origin of things.

It seems to me that where science ends there revelation begins. Science ends with the material universe and man, then revelation begins and leads us up to God. Science stops short of first causes, and here revelation lifts the veil and shows the origin of all is Divine. Science and revelation, as has so often been said, can never be truly antagonistic, as their spheres scarcely ever touch. There is no need for a revelation of what we can ourselves discern, and science can discover much that was once thought beyond its powers. There is now a science of the unseen world as well as of the material universe, and Sir Oliver Lodge has written a large book about it.

But however far science may penetrate it can never reach the sphere of revelation. Science may, as we have seen, postulate a God, or at any rate, an omniscient Mind, or first principle, but it can never discern Christianity. And herein, in passing, lies the essential difference between bare Theism and the Christian faith. The one, in a sense, can almost be realized by science, the other is a revelation from God, or I might say to avoid cavil, professes to be so.

"Earth's crammed with Heaven,
And every common bush aflame with God.
But only those who see—take off their shoes:
The rest sit round and gather blackberries."

But even those who "see" do not see Christianity in the blackberry bush.

Revelation, then, concerns truths that can never be reached by scientific investigation. But this is not necessarily on account of the difficulty of the research, but of the difference between the character and object of the two.

Science may postulate an omniscient Mind, but revelation reveals a Holy, a Loving, and a Righteous God; and these three characters are still impressed, however faintly, upon His creatures; for without a sense of moral right and wrong (of which science knows nothing) Nelson's immortal signal at Trafalgar, "England expects every man to do his duty," would be without meaning, and indeed, the "*homo sapiens*" of biology non-existent. The power of Revelation in the heart of man consists in the fact that it alone gives the answer to all the questionings and dim feelings that arise in his heart and conscience, and thus puts the creature in touch with its Creator.

Without both science and revelation no man can be fully developed as a man. With only one, half of him is unenlightened; and if revelation be what is left out, may we not say the greater half. Science may make us "wise as serpents," but revelation alone can make us "harmless as doves."

Many scientists would fain make a further distinction between the two, and say that science is the study of things that can be known and proved, while revelation deals with matters that cannot be known or proved, but are to be believed.

But this distinction on careful investigation will not stand. Revelation, at any rate, everywhere asserts positive knowledge. The language always is "*we know*." Knowledge is of two sorts, personal and hearsay. The verification of any facts must be personal, and must become a registered result within our own consciousness. It is the ease with which this is accomplished in the facts of science that constitutes one of the strongest testimonies to its truths. It does not merely assert that pure water consists of H_2O , and that the union of these two gases in this proportion will inevitably and always produce this fluid, but anyone who cares to make the experiment can do so for himself, and thus change his knowledge of the fact from "hearsay" into "personal"; and this step is everywhere urged by true teachers of science. It is this experimental, or as we call it in medicine, clinical knowledge, which is first-hand knowledge, that is everywhere insisted on in the best schools, and is always of greater value than hearsay or second-hand knowledge from books.

But curiously enough there are scientists who deny that this sort of knowledge can be arrived at by revelation.

As a matter of fact, the absolute reverse is the case. So far from hearsay evidence or second-hand knowledge being of value in revelation, it is of less value there than in science. It is everywhere condemned, and no man can be truly said to be a Christian man whose knowledge of revelation is solely hearsay or second-hand. "We speak that we do know, we testify of that we have seen," is not the language of those who value second-hand evidence. Still, one word must be said as to the difference in weight and authority of the evidences of revelation and science. These latter, at best, are but the products of human minds, and are therefore liable to every sort of error, when they reach deductions, inferences and "laws"; as has been recently so remarkably shown by the paralyzing powers of radium.

Revelation professes to come from the Supreme Mind, from the infallible God, and to those who accept its origin, its evidences upon its own facts naturally carry greater weight with its followers than those of science with scientists.

But still, it is true, as I have said, that revelation emphatically insists upon knowledge at first hand as a *sine qua non*. Indeed, the well-known saying of the Son of God, "Ye must be born again," means nothing less than that the truth must become a personal revelation from within and not a hearsay evidence from without.

And finally, as I now leave this brief comparison, I would submit that the possibilities of personal verification of the truths of revelation are in their own sphere as simple and evident as those of science. In the latter the introduction of a certain chemical into a fluid can be relied upon to produce well known and definite changes in every case; in revelation it is the same.

Take any island or country of savages the world over, introduce into it the truths of revelation, and the same results will everywhere ensue, indeed can be positively predicted with as much certainty as any chemical change.

Of course, as in science the experiments must be conducted according to certain conditions. Science insists on this and so does revelation. The latter, for instance, being a moral force, does not countenance experiments, *quâ* experiments, but for the moral benefit of those involved; and if this be not held in view and the true end of revelation the object, the experiment will not succeed.

We conclude, therefore, that the knowledge of the truths of revelation is as experimental, as sure, as personal as any truths known to science; but that the sphere of the former only begins where that of the latter ends.

I now turn to a brief consideration of certain phenomena that occupy a sort of doubtful territory between the ascertained facts of science on the one hand, and the truths of revelation on the other.

Amongst these one might mention: (1) the mental or nerve forces and aura; (2) hypnotism; (3) faith-healing of all sorts, including Christian mental, and higher health sciences; (4) possession; (5) miracles of all sorts; (6) telepathy; (7) automatic writing; (8) appearances after death, and spiritualistic phenomena; (9) second sight and clairvoyance; and (10) double and multiple personality.

It is obvious that with such a range of phenomena of the unseen world, any one of which for its adequate discussion would require the limit of a paper, I can but allow myself a very brief reference to each.

1. *Mental or nerve forces and aura.*—I need not say very much on this, as a paper of mine appeared recently on the subject in the *Contemporary Review* (May, 1907) which may be familiar to many. In it I showed that while we are as ignorant as ever as to the constitution of mind or nerve force, and know no more of its composition than we do of ether or of matter, we can nevertheless examine it in various ways. Elaborate reflecting galvanometers have been devised for registering the speed of thought, the succession of thoughts and the mechanism of thought. Dr. Dubois, of Berne, has invented a machine to measure nerve fatigue (ergograph), and the simple sthenometer I here produce is Dr. Paul Joires' of Paris. Its action is based upon the fact that around each person seems to project for a few inches, some nerve force or influence often readily transferable by contact.

It is this force presumably which, as I have described in the *Contemporary*, so remarkably deflects the needle in the way I shall briefly describe.

This instrument (fully described in the *Review*) consists essentially of a balanced straw within a glass case rotating over a circle of 360 degrees. This straw can be deflected and moved over 60 or 70 degrees by some force emanating from the human body that is not heat, electricity, light or sound.

This surrounding nerve force is called the aura, and the old idea of it round the head only, was the halo.

People with acute psychic sense, such as sensitives, clairvoyants, etc. (and such people undoubtedly exist everywhere and are increasing in numbers), can see this projection, and frequently in various colours, surrounding the human form. From this they make various deductions which I need not specify.

2. *Hypnotism*.—The phenomena produced here are due to the fact which I have brought out years ago in this Institute, that only a small part of the human mind is illuminated by consciousness, and that the rest, which I temporarily call the unconscious mind, while possessing great powers, and particularly over the body, is not in the ordinary state readily accessible. The point in hypnotism is to temporarily abolish by hypnotic sleep or waking trance, the voluntary mental powers, and thus lay bare the substratum on which they rest. The hypnotist can then bring this into action and make impressions upon it, which can be retained when consciousness is regained. Hypnotism can thus be used experimentally, diagnostically, and therapeutically; and skilled and highly qualified professors are always at the service of the medical profession for these purposes. I will give an illustration of its powers.

A well known physician with hypnotic powers, having cured a young lady of nineteen of various ailments, tested her hypnotic powers as follows. On Wednesday, March 11th, 1902, at 4 p.m. she was hypnotized in the presence of three medical men, and four suggestions were made that the patient should, after the expiration of the number of minutes they named, make a cross on a piece of paper. These numbers were 21,400, 21,420, 21,428, 21,434. On the right day, Thursday, March 26th, the lady was hypnotized, and made the four crosses spontaneously without suggestion, two of them at the exact minute, one a minute, and the other two minutes too soon.

3. *Faith-healing*.—Here I am obliged to group together in my brief summary many opposing systems and various different powers.

It will be quite impossible for me to give the grounds for the statements I must make on this subject. I must speak dogmatically as one who has studied the subject closely for over twenty years, and refer to what I have written for detailed proof of my statements, and perhaps on this head especially, to a forthcoming article on "Spiritual Healing" in the March *Contemporary Review*.

The power in faith-healing generally that effects the cures is subjective and not objective. It is in that part of the person that is reached by hypnotism—the unconscious mind, and especially that section of it concerned with the care of the body, known technically as the *vis medicatrix nature*.

This power is stirred into curative activity by agents as various as medical instruments, such as thermometers, by bits of wood or metal, by incantation, by charms, by witchcraft, by devil worship (as near Zurich), by idols, by impostors, such as Dowie of Chicago, by kings, by sacred relics, by visions as at Lourdes, and by the sacred beliefs of the Christian Faith. In the cure itself the agency seems indifferent, provided it is sufficiently powerful to excite the faith of the individual, but in the benefits received—the moral and spiritual results—the blessing or the curse which the recovered health bestows, all of course, depends upon the object on which the faith rests. I will illustrate this.

At Zurich, at Mannedorf, Pastor Zeller cured all sorts of cases; but he remarked to me, “the devil cures them just as well at the end of the lake.” On enquiry I found that numbers are cured there by incantations and dancing round oak trees with curious rites. The results were indistinguishable from Pastor Zeller’s.

The case of blind Martha is remarkable as showing how faith cures.

*M. D., thirty years of age, was, with her stick and white dog, a familiar figure in Bayswater for about fifteen years, and was well known as Blind M——. Close enquiry as to her condition and antecedents revealed the fact that she had been considered incurably blind from birth. She had been treated at Charing Cross and Middlesex Hospitals and at Moorfields, and had also long attended at a society for the blind in Red Lion Square, where she was taught to read the raised type. She had a faint perception of light occasionally, but nothing that was of any real use to her. She was seen by one or two other doctors besides those at the hospitals, who told her there was no cure for her. Several people who have known her for varying numbers of years have testified to me that she was practically blind. A general grocer where she has dealt for years told me that he often stood unseen beside her for a trick when she has kept calling for him, and that at no time did she give any evidence whatever of being able to see anything she bought.

Hearing one day that this blind girl had received her sight and

* Extract from *Faith Healing*, A. T. Schofield, M.D., Religious Tract Society, 1892.

was now employed as nurse in a family I knew, I thought the case worth investigation, and found the following was what had actually taken place.

About 1882 she joined the Salvation Army as a soldier, her blindness exciting great compassion. For seven years she remained in the same state, the "Army" as such not holding "faith-healing" meetings. On March 25th, 1889, however, a "Major" P., an aged officer, came to Bayswater, and held on his own account a "faith-healing" meeting at the local barrack. M. D. heard of course of the meeting, and the day before told everyone where she lodged that she was going to receive her sight the next day. She started off, telling the people that she would never need her stick and dog again.

At the meeting she was seated in front with other cases of bad eyes, imperfect speech and lameness awaiting healing—who, by the way, were all healed—one girl, S. D., now in Australia, also regaining her sight. "Major" P.—describes what took place as follows:—

"M. D. was healed miraculously by the Lord in answer to prayer and faith. As directed by James v, I anointed her and prayed over her in great faith, after which she kept quiet for about twenty minutes, then suddenly rose to her feet crying out, 'Bless the Lord! I can see everybody in the place! what will my mother say when she gets to know?' Everyone was amazed, for they saw it was the work of the Lord."

Her own account is that her eyes (closed) were rubbed violently for some minutes, and then, after a while, when she looked up she saw light clearly for the first time, and jumped up and clapped her hands. She found her way down off the platform and looked at her friends' faces. She was astonished to find them look so large, having imagined them to be much smaller. She walked home without her stick, never using it, or her dog, again.

A grocer (who is no follower of the Salvation Army) on being questioned told me there could be no doubt as to the change in her sight since March 25. She would come into his shop now and see not only him but also his wife's shadow on the red curtain behind the shop.

In a short time she got a place, as I have said, as nurse-girl. I called and saw her in service. She went there daily having to walk a mile from her home to the house, a small villa in a long row, which she could only distinguish by the number; once or twice she had gone to the wrong house. She took the children out in the perambulator. I found on examining her that her sight was still very imperfect. But such as it was it filled her with delight. She could tell colours and objects readily, and was learning to read. She knew her letters already. She had great difficulty in seeing objects below the level of her eyes, but could see them well above. Some considerable change in her sight had undoubtedly taken place, and as far as I could gather, at the said meeting.

I took her to two of our leading oculists, who very kindly examined the case for me. The first found that both lenses of the eyes were long gone, probably through cataract of the eyes in infancy. The eyes were also diseased internally. His theory of the change was that the opaque skin that sometimes replaces the lost lenses, and of which some traces were visible round the pupils, might have been ruptured at the time by the violence used, and thus the sight was partially restored. He ordered her glasses by which her vision is greatly improved.

Another oculist did not think it possible that the change could be thus effected, but made no alternative suggestion. A third at a hospital (where she was at once recognised as Blind M——) came to the following conclusion: "That there was still extensive disease in both eyes of long standing; that there was no evidence of any recent changes having taken place in the eyes; but that it is likely that previously she saw better than she thought she did, and that now she thinks she sees better than she does.

Christian science is a system that cures in this way, but being connected with a pure Theism at the same time, greatly elevates the moral tone and character of the healed. It must be pointed out, however, though this is not the place to discuss the question, that Christians the world over are unanimous in utterly repudiating its claims to be Christian.

The gift of healing possessed by some individuals is a little different, and is more objective in character, requiring less faith on the part of the sufferer, as I will illustrate.

About the prayer of faith I should like to say one word, as it is being brought forward so prominently to-day.

The standard passage in the Bible, to which reference is always made in St. James v, 14, which I venture to suggest is greatly misunderstood. The words are as to the sick: "Let them pray over him, anointing him with oil in the name of the Lord," and it is almost universally believed that the anointing is some sort of religious rite or consecration. There is a word in the Greek that means this, "*Krio*," from which we get the word "*chrism*," but this word, which is always used for ceremonies and consecration, is *not* the word used here, but the medical word "*aleipho*," which means to rub in or massage with oil, a process which to this day is the most common remedy amongst the Arabs. When in addition to this we remember that at that time the religious and medical functions were closely allied we can quite understand the "elder" uniting spiritual means (prayer) with medical treatment (oil). I am pleased to say that one of our most distinguished

Prebendaries supports me in this view of the passage, which is so often wrongly supposed to supplant medical care.

4. *Possession*.—I am personally fully convinced from personal experience that certain cases in our various asylums, and seen by me in private practice, of mania or frenzy, cannot be scientifically accounted for, without admitting the possibility of the possession of a human body by a spirit other than his own. I am quite aware this is a highly questionable statement to make, but I feel sure that any trained thinkers who have had my experience would find a difficulty in coming to any other conclusion.

What I refer to are no ordinary cases of lunacy or mania, but sudden possessions of quiet Christian ladies with a raging spirit of outrageous blasphemies and obscenities, and especially a mad hatred of God, that all disappears when the attack is over. I can recall several such cases which to me seem conclusive of the possibility I have suggested.

5. *Miracles*.—The difficulty here is to define what we mean, but it seems to me that whatever definition we may attach to the word, we must reverse the dictum given in *Robert Elsmere* as an unanswerable argument that "miracles do not occur" by saying that "they do." Whatever is meant by a miracle, scientists are clear they occur. One and all, for instance are constantly speaking of the miracle of radium. Professor Boys uses this expression to describe its powers and the way it transcends all known laws. Lord Kelvin also said the same.

But every day the power we call vital, suspends, alters, and modifies well-known laws of nature. Man with his reason and vital force can prevent Newton's apple from falling to the ground by catching it in his hand; nay, can actually make it rise in the air higher than the tree on which it grew, by a force that reverses the law of gravitation. And there still remains the unanswerable question of how the apple, or if you like the coconut, weighing many pounds, climbed up into the air against all laws of gravitation and got into the trees at all.

We read of the miracle of floating iron in the Old Testament, but though this may not be paralleled by floating ironclads, it is by the mere fact that anyone can hold up an axehead in the water. In the story the arm that held it was invisible and Divine, with us it is visible and human, but the reversal of the natural law is the same.

In the story the power is supernatural, and hence we call it a miracle; in the illustration the same phenomena occurs, but

the power is natural, and hence we do not call it a miracle.

Of course to the Christian man who believes that Jesus Christ rose from the dead, there can be no wonder whatever that miracles happened during His lifetime when He Himself was the transcendent miracle of all. Of course of these, as of the resurrection, the scientist requires proof. But to-day in a minor degree cures and other phenomena occur without any known natural cause, and hence are deemed supernatural.

The Welsh revival may be referred to as a miraculous manifestation; and Lord William Cecil's letters to *The Times* respecting remarkable miraculous outbreaks of an unknown force in Corea will be recalled by many.

He states that during the session of the Bible School for training the Coreans, a dull unemotional people, in Scripture most extraordinary manifestations took place of some unseen power. A man suddenly rose from the desk where he was writing and began to cry to God for mercy, and then to confess some most awful sins, including the murder of his infant daughter. They tried to silence him but in vain, and then one and another rose, and for one week the school was an amazing scene, one Christian man after another rising up and confessing sins of all sorts, and apparently finding no rest till they had made what restitution was possible. Afterwards all subsided; the conditions again became normal.

6. *Telepathy*.—One may almost say that thought transference is now a scientific fact, and is being increasingly noted as an ordinary occurrence in the experience of many. The familiar and constantly recurring fact of letters crossing is an example of this.

7. *Automatic writing*, at which my versatile friend Mr. Stead is an adept, is, I think, proved to be a fact. None who have seen it or ever heard at first hand the statements of Mr. Stead and others, can doubt that we here have some force that is at present but very imperfectly understood. Whether it be an extreme form of unconscious auto suggestion, or whether it is some form of spiritualistic manifestation of which science at present knows little, still remains uncertain.

8. *Appearances after death and spiritualistic phenomena*.—In general these are unhappily connected with an extraordinary mass of fraud, from which it is difficult, and often a somewhat nauseous task, to disentangle the truth, but there does remain a very solid substratum of fact vouched for by men of the greatest probity and scientists of the highest standing. As to

appearances after death I have what I might call almost first-hand knowledge.

My brother died unexpectedly in Inland China, and the same night appeared to his wife's two sisters, who had not heard of his illness, in different parts of India. They thought their sister was ill, and never thought of him, and it was not till months after that news came to them *via* England that he died the night he appeared. Both were wives of Army medical men.

9. *Second sight and clairvoyance*.—There can be no doubt that these powers are being greatly increased in the present century, and that sensitives or beings whose psychic powers are abnormal, are much more common. I know many such of the highest character and principle.

There can, I think, be no doubt of the scientific truth of these powers.

10. *Double and multiple personality*.—The former to some extent exists in all, and there is no man here who has not at times taken part, sometimes involuntarily, in mental dialogues between the two often involving sharp discussion of a painful nature. Dr. Jekyll and Mr. Hyde exist in all. But when they alternate in their complete possession of the faculties the condition is pathological.

I have at present a case that alternates between a shrewd woman of forty and a silly child of five, caring for nothing but dolls and sweets.

I should like also to add that it will be observed that the constant movement is always from the occult and unknown to the scientific and the known; and that innumerable phenomena once regarded as the direct work of good or evil spirits are now proved to be scientific facts, leaving of course behind them again another dim series in their turn at present quite unaccountable.

I for one, however, feel that in view of the wonderful forces that are being brought to light and put to such remarkable use, many more of these mysteries of the unseen world will be cleared up, and the boundary line between Science and Revelation made more apparent, and the great work of this Institute in the full and adequate recognition of both thus made easier, and its accomplishment brought nearer. The longer one lives the more one sees the folly of denying the truth of phenomena we may not understand.

In conclusion I can only say that no one can feel more than I do how extremely unsatisfactory such a very brief survey of such a very extended subject must necessarily be, though I fear even this hurried sketch has been too long.

DISCUSSION.

After the conclusion of the paper, the CHAIRMAN (D. HOWARD, Esq., D.L., F.C.S., F.I.C., Vice-President) said that such papers as that to which they had just had the great pleasure of listening, showed how great is the danger run by those who consider that nothing can exist which one does not understand; on the other hand we have to be careful at the present day not to run into the opposite danger, nor be led by the fact that some things are wrongly understood, to consider that nothing exists which one does understand. He had pleasure in calling on Dr. Stenson Hooker, who would follow up the remarks on the aura made by the reader of the paper.

Dr. STENSON HOOKER prefaced his remarks by pointing out that the fact of the existence of the aura was based on scientific experiment, and that the sanity and unemotional nature of the belief in the existence of this manifestation ought to carry weight. He himself had now given up experimental work owing to the physical and mental depletion which was, as Dr. Schofield had remarked, too often the accompaniment of such research. When the phenomena of the aura were first pointed out to him he had been deeply interested, but at the same time extremely sceptical. He had engaged in this sceptical spirit on a course of research which lasted for three years. He had conducted over 300 scientific experiments from which all guesswork had been, as far as possible, eliminated. The result was that the only possible conclusion to which he could come was that this force, this invisible emanation, of which the aura was the visible sign does certainly exist. There was, he believed, in every person a force which radiated outwards and in a greater or lesser degree affected other things with which that person came into contact. These force radiations, or *n'* rays, were visible to some but invisible to others, and in the form of a visible coloured radiation from the person were known as "the aura."

A tabulation of the different appearances had been made according to colour and thought, and when it was seen how closely the results given from study of the particular aura tallied with the

observations of those who had the most intimate knowledge of the character of the person under observation, the conclusions drawn could not be doubted.

The transference of the healing power from one person to another points most distinctly to planes of operations for the action of this force, to the existence of a medium through which it passes and rays by which it traverses the medium.

In the aura the thoughts of the moment give the colour: the general character of the manifestation is more or less uniform in each particular case, but the aura is coloured according to the thoughts of the individual. The brightest and best colours which he had observed were those radiating from a letter of the late Mr. Gladstone which the speaker had held in his hand. Those who have the necessary development can see the aura, those who have not should not on that account disbelieve. The man of science with the proper instruments can see many things hidden to the unaided vision: but it is held absurd in others to disbelieve in the existence of things thus seen because they have not the necessary instruments.

Colonel T. H. HENDLEY, C.I.E., said he would like to ask Dr. Schofield whether in the case of Blind Martha an ophthalmoscopic examination had been made, and how long she had been blind.

Dr. SCHOFIELD admitted that he did not know her medical history in detail and so far the case was defective, and as to the latter the blindness had existed from childhood.

Colonel HENDLEY asked whether such cases might not be due to malingering? Great powers were sometimes displayed as occurred not unfrequently in the days of long service in the army. Books had been written on the subject. There was a case of a soldier who remained dumb for several years, resisting the most ingenious efforts to discover whether he really was so or not. At last a certificate of discharge from the army was made out; on ascertaining which, and, believing it was irrevocable, the soldier was heard to speak. The speaker saw a woman who had been the round of the London hospitals and who was brought on a bed into the casualty ward of the institution in which he studied suddenly recover after some years under the stimulus of the electric battery. As she rushed out of the room she knocked down a porter with whom she was offended. Her relatives had spent a large amount upon her. He asked how

such cases as those in which Mr. Esdaile, a Calcutta surgeon, about the time of the introduction of chloroform, removed limbs and tumours by the aid of hypnotism without pain, were accounted for.

As to the influence of faith over physical conditions he mentioned the explanation Sir James Paget used to give of the cure of warts by gipsy women. A girl who suffered it might be from warts on a finger was told by the gipsy to tie a rag round it, and then to look steadily at it every night at twelve o'clock, under the moon, if possible, for a fortnight, when she would find it had disappeared. It often did, because the constant direction to the part had so altered the circulation of the blood or its condition that the nutrition of the wart was changed and so a cure effected. As to the case in which a lady used gross language and expressed the most horrible thoughts, was not this condition common enough in certain cases of temporary insanity in women, and not unfrequently in those who had, as far as was known, never heard anything of the kind? He observed that an experience of his own showed him anyone might hear such language. Two or three days previously on reaching the platform of a tube station he saw one man in the garb of a gentleman suddenly abuse another, seemingly a stranger, in the foulest terms, to the disgust of a crowd of waiting passengers.

It was thus easy to see that opportunities of the kind might occur—and he believed that just in proportion to their rarity they made an impression, which seemed soon perhaps to pass off, but which was possibly for that reason more easily reproduced in disease.

He enquired whether automatic writing was similar to the old *planchette*, and whether dual personality was really not due to the two sides of the brain not acting together.

As to Mr. Stead's communications had they done any good to him or anyone else?

Dr. SCHOFIELD was understood to reply in the negative.

Colonel HENDLEY, in a long career in the superstitious and credulous East, had seen nothing of the kind. 250 years ago a most painstaking observer, Bernier—physician to the Emperor Aurangzeb—had come much to the same conclusions. He had conducted enquiries in Kashmir, one of which was to the point. He went to Baramulah at the exit of the River Jhelum from the valley

to see a miracle performed at the tomb of a holy *pir* or saint, there. It is said there was a large round stone that the strongest man can scarcely raise from the ground, but which eleven men, after a prayer made to the saint, lifted up with the tips of their little fingers with the same ease as they could move a piece of straw. He noticed that the stone was lifted with much effort, but as he expressed his faith, and added a bribe, he was allowed to assist. As he used only his finger so that the stone constantly inclined his way, and even when he added his thumb the weight could hardly be got up, it was clear there was no miracle, but a tumult was raised and he had to run for his life.

Rev. JOHN TUCKWELL, M.R.A.S.—Dr. Schofield has raised a great many questions and it would be impossible even to touch upon them all. But I may be permitted to say a word concerning the case of “Blind Martha.” I knew her twenty years ago as she attended my ministry, and I, as well as others, was convinced that she was not so blind as she appeared to think, for it is quite possible for patients suffering from nervous infirmities to think themselves much worse than they really are as we know; but “Blind Martha” could run about in my school room among a number of iron columns supporting the upper part of the building, and romp with the children of my Sunday school and never run foul of these columns. She lived in a room by herself and did everything for herself. She could go through the streets also with great confidence. But her blindness brought her a great deal of sympathy and my impression is that she was led to suppose herself worse than she really was. Personally therefore I could not accept her case as evidence of the reality of faith healing.

May I say also concerning Dr. Schofield’s reference to miracles that an event can scarcely be described as a miracle because it “transcends all known laws” as in the case of the “miracle of radium” as Professor Boys expresses himself. I have read of a missionary who in order to create an impression on the minds of the natives of the country where he laboured, suddenly took out his artificial teeth and allowed them to examine his toothless gums and then replaced them again. But that was not a miracle. Surely the only correct definition of a miracle is that it is an effect produced in the constitution and course of nature by a *supernatural* force—a force that is outside and above it whether Divine or demoniacal.

Then with regard to automatic writing and communications from the departed, Mr. Stead is a very interesting man ; but against his belief that he has received communications from the late Mr. Myers, I remember to have seen a little while ago a very definite statement from Mrs. Myers that she did not believe any of the alleged communications from her deceased husband had really come from him. However, it is well that all these matters should be investigated, and we are, I am sure, deeply indebted to Dr. Schofield for giving to us the benefit of his thought, observation and experience this afternoon.

The Rev. SIDNEY PIKE, M.A., said that he would recommend those present to study the 18th Chapter of Deuteronomy, in which the Israelites are strictly forbidden by God to have any dealings with familiar spirits or a necromancer (*i.e.*, one seeking intercourse with the dead), because all these are "an abomination unto the Lord." And the chapter distinctly states by way of warning, that "Because of these abominations" the Canaanites were driven out of their land. There was great danger that in enquiring into the things of the kind they were now considering, they might forget the Scriptural prohibition, and enquire into things forbidden.

As to "spiritualistic manifestations" he feared they were from the evil one, and they would do well to remember that the word of God declares :—"In the last days perilous times shall come," and "Some shall fall away from the faith, giving heed to seducing spirits and doctrines of demons." Also the Lord Jesus had Himself spoken of "Great signs and wonders, which would," if it were possible, "lead astray even the elect."

The attempt to forecast the future, as in "clairvoyance and second sight," seems to conflict with the Scriptural statement :—"Ye know not what shall be on the morrow," which God has mercifully ordained, so that the knowledge of the future, whether good or evil, should not unfit us for the present.

Dr. VAUGHAN BARBER said that with regard to the danger of looking into these things in his opinion this is a view not to be taken. The whole matter must be looked into earnestly and faithfully by competent persons. The results may be of great use even if it be dangerous for the weak-minded to tamper with the processes by which these results are to be obtained and used.

Children should not play with gunpowder, but to those who are competent it is most useful.

For the period of two years he had taken the greatest interest in hypnotism, and had subjected it to a thorough investigation. He was of the opinion that a proper use of hypnotism was most advantageous in the practice of medicine. With this view he put the matter before two sisters, patients of his, who both refused to have anything to do with it. One of them, however, fell seriously ill twelve months ago, and suffered great pain. Having previously refused to be subjected to hypnotic suggestion, she was now in sickness unable to respond to it, and died under the effects of morphia injections. The surviving sister, after this sad experience, allowed herself to be subjected to hypnotism, and has since found it of great benefit.

Dr. GEORGE H. MARTIN, of San Francisco, said that as the discussion had taken a direction along medical lines he should therefore take up another line of thought. The medical facts are so well known that they cannot well be controverted by anyone who has given any real thought to the subject. But there is a phase of the subject which has not yet been touched upon.

Every year we are coming more and more to feel the facts of the unseen world as real things, as real as any physical facts. Thoughts and feelings are being studied scientifically. Science is simply the classification of knowledge, and thoughts and their effects can be just as accurately investigated as any other kind of knowledge. The greatest and most potent fact in human life is the belief in a future existence. If we believe that there is a reason for everything and a cause for every effect we must believe in a hereafter, for every race that ever existed on the earth has believed in some kind of a future life. Christian and pagan, Jew and Gentile, educated and uneducated, have all been born with that belief in them. It is the most real thing on earth to-day. It must be true that there is a hereafter, or that thought would not be so persistent through all the ages of mankind. There must be a reason for this persistence, and that reason is that we are to develop ourselves here upon earth to the greatest possible degree that each individual may take the highest position possible to him in that future existence. We do not know the plan by which our experiences come to us, but we know that we are here, and that there must be a reason for it. If

such thoughts as these are real enough and potent enough to shape human life through the ages are they not facts—scientific if unseen? I claim that they are.

If we will but stop a moment to analyse our thought we find evidences of the unseen world always round us. We do not know why after carefully studying out a certain definite plan of action for our own welfare we are absolutely unable to carry it out, indeed, have to give it up and follow a course which is its direct opposite, and yet in the end proves to be far better than any we could have planned with our present knowledge. We do not know what impels us to do things for doing which there is apparently no reason, but which really shape the whole course of our lives. These are experiences which occur in every human life. There must be a reason for them. They must mean that there is an Omniscient Eye which looks on each individual life. If these facts be true they mean that our whole lives are shaped by the elements of this unseen world. If these elements are so powerful as to influence us in many directions they are certainly demonstrable scientific facts. Religion is a fact, and yet religion is only faith, and “faith is the substance of things hoped for, the evidence of things unseen.” Faith shapes the course of human lives, yet cannot be demonstrated except by its effects. Its effects, however, are so evident that no one can deny them. Therefore *a posteriori* faith is real, although unseen.

These facts might be enumerated at great length, but it is not necessary. It is only needful to put forward, as Dr. Schofield would have done had time allowed, the truth that they do exist and are scientifically demonstrable. It is possible to go further than Dr. Schofield, and say that revelation is faith, and that faith is material because scientifically demonstrable as any natural fact can be.

Professor LANGHORNE ORCHARD thought that they were under thankful obligation to the learned author for a thoughtful and suggestive paper. It had brought before them the fact that the world of spirit is as real as, and more important than, the world of matter. We shall agree that there is no conflict between the Revelation given in nature and that given in the Bible. Science, unable to regard the universe as self-originated, seeks its antecedent and cause in God; and in the beautiful language of the paper, attempts “to decipher the handwriting of the Almighty on the Universe.”

In the spiritualistic vagaries now in vogue may be largely traced a reaction from materialism. The wise investigator, whilst steering clear of the Scylla of atheism, will not be engulfed in the Charybdis of superstition.

With reference to some of the phenomena mentioned, the author appears to go rather too far.

On page 58 we meet with the expression, "Double and multiple personality." Here different *moods* of personality seem to be confused with personality itself, and to be looked on as different personalities.

In connection with the miraculous swimming of the iron axe-head alluded to on page 56, the better view is, surely, that there was *not* a "reversal" of any natural law, but that the force of gravity continued to operate but was counteracted by the Divine arm. There was not reversal, but counter-action.

We shall thoroughly consent with the author's able reasoning to prove that the evidence from "first-hand" revelation of Divine truth is not less strong than is that for any scientific discovery.

Dr. SCHOFIELD's reply in conclusion, is as follows:—

In reply to Colonel Hendley I may say that I, of course, excluded in my description of temporary manias, with which he and I are familiar, and I referred to cases which could not be explained on ordinary scientific grounds. As to his and the Rev. J. Tuckwell's remarks on Blind Martha, I should like to say that malingerers generally deceive for their own advantage; but in this case the girl was in every way pecuniarily and otherwise in a better position with her eyesight than without it. I may say my mother obtained her her place and taught her to read, and there is no doubt whatever that practically she was without effective sight before her cure, and that afterwards, though the eyes were diseased, she could see for all practical purposes.

I may add I have given the definition the Rev. J. Tuckwell suggests at the foot of page 62. With regard to the late Mr. Myers, I never for a moment suggested that the automatic letters came from those whose names were attached to them.

A note on the address has been sent by the Rev. A. Irving, in which he suggests that I limit science to the human *microcosm*. On the contrary, it is of *cosmic* science I speak. No doubt Lord Kelvin, when he inferred "the existence of God," meant more the

"mind," but I doubt that science alone can get further than an Omniscient Mind, or First Cause.

The Rev. A. Irving finds his patience taxed by my remarks on the coconut and apple, but I think he fails to appreciate my point that the force that effects the elevation of these fruits is what is called vital, and which is still enshrouded in such mystery that I feel sure, if Mr. Irving will grapple with the unanswerable question I propose, he will find his patience still more severely taxed. Professor Lionel Beale, F.R.S., was the first who called my attention to the phenomenon of the apple in the tree.

The "Divine aim" of my "fiction" is well-known Scriptural imagery; this perhaps may still be deemed too anthropomorphic. At best it is only an illustration and not a theory. I have to return my thanks to all those who have listened to a paper that suffered severely from the undue condensation consequent upon the extent of the subject matter, and also for their patience in hearing so many debateable subjects introduced without the opportunity for fairly discussing them.

NOTE ON DR. SCHOFIELD'S PAPER ON "SCIENCE
AND THE UNSEEN WORLD."

COMMUNICATED BY THE REV. A. IRVING, D.Sc., F.G.S.

The paper by Dr. Schofield is interesting and valuable to the great majority of us, who are debarred from the same extensive observation of psychological phenomena as falls in his way as a professional man. The first part of the paper leaves upon one's mind the impression that in his use of the term "Science" its connotation is mainly restricted to the science of the human *microcosm*, almost oblivious of the vastly wider *cosmos* to which science in the larger sense extends its investigations. It is surely within the range of human consciousness that we find the borderland, where things which are matters of revelation and things which are matters of scientific investigation—"the things which are unseen and eternal" and "the things which are seen and temporal" (to use the Pauline dictum) not only meet but coalesce. I cannot therefore follow the learned author when he says that "their spheres scarcely ever touch." A truer philosophy surely teaches that they both centre in God, and are not therefore in the last resort diverse. Again when we are told that science may "postulate" an omniscient mind we are on a different line to that of Lord Kelvin's dictum (which I heard him utter), which affirms that science can (and, if thoroughgoing enough, must) infer the existence of God. It is the function of philosophy to unify the two spheres of thought and belief; and their differences arise not only from "the character and object of the two" (p. 49), but also from the difference of the faculties called into play. The fundamental difference is that the one field of thought requires the purely intellectual faculties; the other appeals to the intuitive and perceptive faculties, to all that constitutes spirit (volition, emotion, etc.) and requires the "venture of faith," which may and does challenge the test of experience in its results, even as scientific theory does in another way. There are some excellent remarks on this point in *Thoughts on Religion* by George Romanes, no mean scientist; and it is urged in the New Testament *passim*.

In the second part of the paper Dr. Schofield seems to me (as a layman) to present us with a pretty complete outline map of the ground which the modern science of psychology in its present inchoate stage is attempting to explore. There occur, however, in it several expressions which seem to carry to the mind of a student

of more exact science a certain looseness of thought. Thus on p. 56, we are told that the apple fallen from the tree may be caught in the hand or made to rise to a height greater than that from which it has fallen "by a force which reverses the law of gravitation." Here the *effect* of gravity is intercepted, but by the expenditure of the energy required to intercept it; and a little thought will show that gravitation in this way takes its toll, just as much as if it continued to act as an accelerating force upon the falling pome. And that remark about the coconut "climbing up into the tree against all laws of gravitation" is, to say the least, a tax upon one's patience. Everyone knows that it was made where it grew by the combination of forces employed in the physiology of the life of the tree, some more, some less amenable to the laws of gravitation. The fiction of the "Divine arm" holding the axe-head up in the water, smacks too much of the crude "carpenter theory" of Creation, and is altogether unscientific. Such *lâchetés* do not strengthen the claim of Psychology to be considered a true Science.

*491ST ORDINARY GENERAL MEETING

MONDAY, FEBRUARY 1st, 1909.

PROFESSOR E. HULL, LL.D., F.R.S. (VICE-PRESIDENT),
IN THE CHAIR.

The Minutes of the previous Meeting having been read and confirmed, the following candidates were elected as Associates of the Victoria Institute :—

Edwin H. Banks, Esq., M.A., D.L., J.P.
Miss Mary Beachcroft.

The following paper was then read by the Author :—

CHRISTIANITY AND SOCIALISM. By W. CUNNINGHAM,
D.D., Archdeacon of Ely.

FEW occurrences in the history of the English people have been more remarkable than the rapid strides which have been made by Socialism, during the last thirty years, in capturing public opinion, and becoming a great political force. In 1879, it had hardly any footing in England at all; the ordinary newspaper reader regarded it as a craze which took possession of hysterical foreigners, but which had no attraction for the common sense of Englishmen. Trade Union policy was entirely uninfluenced by it, in the days of the Junta;† and till the *Fabian Essays* were published in 1889, there was little evidence that its doctrines had any hold in literary circles. But the world has moved since then; many measures, which the last generation would have condemned as socialistic, have been passed by Parliament; and, in any gathering of clergy and ministers, there are sure to be many who take a pride in declaring that they are Christian socialists. It may be doubted whether any such rapid change in public opinion occurred even at the Reformation itself; and there is no other period in which the modification of accepted principles has been comparable to that which is taking place in the present generation.

* Held in the House of the Royal Society of Arts.

† S. and B. Webb, *History of Trade Unionism*, 215.

Thirty years ago there seemed to me to be some difficulty in accounting for the slow progress which Socialism, despite the influence it was exercising in foreign lands, had made in England.* The rapidity of the success of the invasion of socialistic ideas since that time has been chiefly due, as I believe, to the weakening or withdrawal of two restraining forces, one political, and the other intellectual. It may be worth while to say a word about each of these in turn before going on to discuss the relation of Socialism, as a doctrine of life, to Christianity.

I.

During the seventeenth and eighteenth centuries, there had been an increasing feeling that the sphere within which the State could advantageously interfere was somewhat limited. The sentiment against unnecessary State regulation had played no small part in the growth of popular discontent which culminated in the Great Rebellion; Adam Smith had insisted on the mistakes which the State is likely to make, and on the cumbrousness of its machinery; and the evils, which grew up under the old Poor Law, had led many people to fear the incidental and unforeseen mischief which may arise in connection with the best-intentioned legislation. The fact that there are many evils which government cannot cure, was a recognised axiom on the part not only of Members of the House of Commons, but of electors during the greater part of the nineteenth century. The governing classes were convinced that it is impossible to make men moral by Act of Parliament, whereas Socialists hold, according to Mr. Shaw in to-day's *Times*, that they cannot be made "either moral or happy in any other way." But the Reform Bill of 1832 transferred a large share of political power into the hands of sections of the community who were inclined to hope great things from their new rights. The Chartists had reckoned that, if only they could secure political power, all merely social wrongs would be put right; and the classes, who were enfranchised in 1832, have been inclined to cherish the same belief; it is the mainspring of much of the agitation for Women's Suffrage in the present day. The powers of the State are so vast and far-reaching, that it is easy to form an exaggerated view of what it can wisely undertake and carry through; and those, who have not

* Compare my article on "The Progress of Socialism in England," in *The Contemporary Review*, xxxiv, 245, January, 1879.

shared in political power themselves, are apt to attribute the failure of the legislature to introduce more general conditions of welfare to the indifference, or the selfishness, or the greed of the landowner and capitalist. Since the classes which had hitherto been unrepresented began to realise their strength, they have been eager to put forward such proposals for improving the material condition of the most helpless elements in the community, as that for providing at public expense for the housing of the poor. According to the older opinion it would be impossible for the State to take up such matters wisely and without the serious danger of doing in the long run more harm than good.

II.

While then there has been a new incentive to the introduction into Parliament of schemes which a bygone generation would have denounced as socialistic, there has been less facility for discussing them thoroughly and critically, owing to the changes which have taken place in the academic study of Political Economy. The *laissez faire* doctrine had diverted scientific investigation from the empirical enquiries which can be most usefully undertaken*; such are investigations as to the best means of attaining some particular material benefit, the maintaining rates of wages, the improvement of employment, and the opening of new markets, or as to the best means of rendering small holdings profitable, and so retaining the rural population upon the land. Much admirable work of this kind has been done by Royal Commissions, and is embodied in their Reports, but it lies outside the scope of current economic science. The academic economists in England, under the influence of *laissez faire* principles, were not inclined to spend much time in studying the precise conditions of any industry or branch of commerce; they believed that the growth and decay of trades could be left to settle themselves. So far as practical life was concerned, they were merely prepared to take the part of critics—to formulate the principles according to which the increase of national wealth would go on most rapidly—and to approve or condemn particular proposals by the application of these principles. They did not profess to lay down what ought to be done in regard to any matter, but only to criticise actual projects from a particular

* See p. 80 below.

point of view; they held that theirs was an important standpoint, but they were careful to make clear that they did not regard it as the only standpoint. The Classical Economists dealt with one side of life—the pursuit of wealth—which was isolated for the sake of convenience of study; they had a strong position for negative criticism, by pointing out cases in which injury was likely to be done to national opulence, as, for example, war must injure it, for a time at least, and perhaps for an indefinitely long time. But they did not pretend to be able to give positive advice as to what ought to be done, because they were not wholly forgetful of the one-sided character of their own knowledge.

A purely critical rôle is one which rouses little enthusiasm, especially when experience proves the criticism to have been sometimes mistaken. Carlyle and Ruskin gave expression to a sort of disdain for the dismal science which was increasingly felt in the fifties and sixties. The British public have been inclined to resent the self-restraint of scientific students and to insist that, if their science is worth anything, Political Economy ought to be able to give direct and positive guidance in political life, not merely on particular economic questions, but on matters of social policy. The controversy over the Corn Laws proved to be a turning point in this matter; on the one hand there was the attitude of MacCulloch—the last and the most learned and most realistic of the classical economists—who criticised restriction from the scientific standpoint; and on the other there were Cobden and Bright, preaching an economic doctrine of free exchange as the harbinger of welfare at home and universal peace throughout the world. From 1846 onwards it became increasingly difficult to maintain the old attitude as to the narrow limits of scientific investigation in economics, and to maintain its hypothetical character. The popular view that it was capable, not merely of criticising, but of giving positive guidance in regard to the material aspects of national life became more and more deeply seated.

The demand soon called forth a supply; Professor Marshall has made a gallant attempt to re-cast Political Economy, so that it shall be better accommodated to meet the popular need of positive guidance. He has endeavoured to enlarge the scope of Political Economy, by abandoning the view that it confines its attention to material wealth, and to the motives which it calls into play. In his inaugural lecture* he showed

* *The Present Position of Economics*, 1884.

that he was jealous of the fair fame of the science, and determined to present it in a form in which it could no longer be stigmatised as selfish, but should concern itself with motives to action of many kinds, altruistic as well as self-regarding. As thus re-cast, it seems to give a doctrine of what is wise to do in regard to material things; and Professor Pigou in his inaugural lecture* insisted on the practical aspects of Economic Science, though he reserved the right to speak authoritatively to the chosen few who can conjure with the mysteries of statistics. He does not disclaim the power of giving positive guidance; he seems to think the scientific economist could really do it if only he had time enough. Unfortunately the age is in a hurry, and wants to act, while academic economists are temporising and weaving a web of pretentious words.

From the point of view of the plain man it is important that morality should be taken into account adequately, if it is dealt with at all. The old Political Economy did not pretend to deal with it, and disclaimed any pretension to use the word "ought"; the "new" Political Economy speaks with a less certain sound. The "new" Political Economy does not allow fully and properly for the operation of public spirit or the sense of duty; such things evade the economic calculus; but still it professes to take account of them as utilities, and merges them all in the calculation of expediencies. The older economists could make clear what they were talking about; and especially could specify what they left out of account temporarily, in order that proper stress might be laid upon these other factors at the proper time. Just because the older economists made it quite clear what they assumed and what they had before them, it is possible to learn a great deal even from their mistakes; it is very instructive to try and see how far a man like MacCulloch was mistaken, and why he was mistaken, and this is possible because his treatment was really scientific. But the "new" Political Economy never makes plain what it assumes; it is so far concerned with subjective forces that it is difficult to use it to explain the actual occurrences of the past, or to test it by them. I have argued elsewhere that in framing it there has been an abandonment of the scientific attitude, and that the result is a mere "hybrid" science†; it fails to provide a good

* *Economic Science in Relation to Practice*, 1908.

† *The Wisdom of the Wise*, 17. Compare also the criticisms of the New Political Economy, by Professor Nicholson (*Principles of Political Economy*, L. 51-65). Professor Ashley (Presidential Address to Section F

mental discipline in preparation for the investigation of the facts of actual life*; and it has done much to divert economic study in England to lines that are unfruitful, while it has also exercised a still more regrettable influence on the public mind. The fact that a "new" Political Economy has been put forward, in academic circles, has gone a long way to discredit the older doctrine all along the line. The Malthusian principles of population, and the law of diminishing return for land are in popular opinion part of the "old" Political Economy which has been discarded, and it is supposed that they have ceased to deserve any attention. The body of scientific principle which has been established as the foundation for the criticism of practical proposals has been abandoned, and there is no longer any recognised basis of organised knowledge from which to criticise the projects of any sentimental charlatan. Since the "new" Political Economy has come into vogue the warnings of the prophetic voice have been silenced, and the public are encouraged to hope that a much desired image will sooner or later be available, to go before the people to the promised land.

III.

The rapid progress of Socialism is sufficiently accounted for when we see that the Government of the country has to a great extent passed into the hands of classes who have an exaggerated belief as to the work which the State can wisely attempt to do; while the old scientific standpoint from which its projects can be effectively criticised and rightly appreciated has been officially abandoned. To a very large number of educated persons it has come as something of a relief to believe that they are now set free from any intellectual obligation to refrain from advocating proposals, to which they are impelled by a sentiment in favour of the less unequal distribution of wealth, and their sympathy for the poor. In so far as they had read Political Economy, *e.g.*, in John Stuart Mill, they had found much of it clear and convincing; but yet there seemed to be a blot upon it, from its persistence in studying the effects of self-interest; and in so far as it was popularly made a basis for or a justification of practical conduct, it was clearly unchristian. The "new"

of British Association at Leicester in *Economic Journal*, xi) and M. C. S. Devas (*Political Economy*, 23, 129).

* See my article, *A Plea for Pure Science* in *Economic Review*, iv, January, 1892.

Political Economy has seemed to remove the old blot, and to present the truth about material wealth in forms in which it is easily compatible with Christian teaching. Hence to many minds there appears to be good hope that it might now be possible to devise a gospel of material welfare which shall be in accordance with Christianity. The example of the Free Trade era, and the positive preaching of an economic doctrine which carried in its wake the hopes of an universal peace between nations, gave a sort of inspiration as to what might be attempted in regard to the reorganisation of society within the realm. Though the superficial observer may not remark upon it, a little reflection shows that the fundamental principles of those Free Traders who have abandoned *laissez faire* are the accepted axioms of socialism ; and the consciousness that this was the case has rendered a large section of the educated public ready to believe that Economic Science was in favour of both one and the other. Since social enthusiasm has been hailed as "the beginning of economic science," it has appeared that science and religion might unite together in advocating, not perhaps the extreme views of anarchists, but the milder form of revolution, which professes to be a Christian Socialism. It may be worth while to consider in turn and very briefly whether this new doctrine has a sound basis in science, and whether it is really compatible with Christianity as a philosophy of life.

IV.

There are undoubtedly many features of the present industrial system that must be regarded as wasteful ; if society were better organised, energy that is now spent in pushing the goods of particular firms might be diverted into other channels, and much of the uncertainty in business, with the fluctuations in trade, might be at all events reduced ; though it may be doubted whether any organisation could get rid of these variations altogether. In so far as State socialism or municipal socialism can supply a system of administration which meets these defects, and enables the business of the country to be better carried on with less waste, and equally effectively as regards the requirements of the public, it would approve itself. In so far as socialism can get similar results by less wasteful methods it would prove itself economical ; and hence all the economic criticism of the existing system may be regarded as an invitation to suggest and attempt an experiment that shall prove itself better. That is a process that is going on every day, in the State

management of the telephone and telegraph service, and the municipalisation of electric lighting and power, and tramways; it is a form of the competitive process through which a great many experiments in collectivism may demonstrate their superiority, and survive and flourish. There are some people who believe it is going on too fast, and that some of the alleged savings are unreal; but the two alternatives of public management and private enterprise are to be tested by economic considerations, and it is probable that one may be preferable or the other in communities of different types, according to the habits and degrees of education which are current among the people.

When, however, we pass from the criticism of the existing order to approval of plans for the reconstruction of society, it is impossible to appeal to Economic Science with any confidence. The underlying principles, which have been put forward by the advocates of Free Trade, and which are adopted by Christian Socialists, are not matters on which Economic Science speaks decidedly or on which it can claim to say the last word.

1. Free Traders are inclined to look entirely to the consumer as the person to be considered, in considering the success of our trade policy. It is clear that all the inhabitants of the realm are consumers, though not all are producers of material goods, and therefore this standpoint seems to take account of the requirements of all members of the community, and not of any particular section. The advocates of Free Trade assumed that in the present constitution of society, with individual enterprise and competition, production was sure to go on somehow, and that under a Free Trade system every kind of production would be carried on in the place to which it was best adapted. But it is a somewhat different thing to look principally at consumption and the distribution of the wealth already acquired, when we are discussing the reconstitution of society; we are not justified in taking for granted that efficient production is sure to go on under all social conditions. Production and consumption are both phases in the process of economic life; but the primary thing economically, for the maintenance of society and for its progress in the future, is that there should be favourable conditions for production. The more distribution is improved, so as to be as little unequal as maybe, or so that whatever inequalities exist can be justified as reasonable and right, the better; but if production is injuriously affected, there will be less material wealth available, and a diminution of average material well-being. If we lay undue stress on consumption we are in danger of giving exclusive

attention to the desires of the present generation; it is by turning our attention to production that we can best take thought for the generation of consumers who are yet to come. When we are looking to the organisation of society in the long run, the important thing is, not to look merely at consumption, but to make sure that the production of useful things, so that they shall be available for distribution, goes on steadily and well. Consumption looks to present conditions and the wealth that has been acquired, production looks to the future, and the prosperity of society in the long run. It is of course conceivable that Socialism may in some circumstances and conditions supply greatly improved organisation for production, and therefore an increased mass of wealth (see p. 76, above). It is particularly unfortunate, however, that socialistic writers and speakers at present are so much inclined to dwell on the advantage of distributing wealth differently among consumers, and are not at more pains to show that the stimulus to efficiency in production will be maintained under their system.

2. Economic science may have much to say about the production, distribution and exchange of wealth, whatever kind of community is taken as the unit. In the ancient world, and in medieval times, the city was a convenient unit for most economic purposes; and with the rise of nationalities, in modern times, the nation has come to be a convenient unit, both for political and for economic purposes. But the advocates of Free Trade have taken a somewhat new departure in treating the world as a whole, as the unit they had in view;* they are inclined to disparage the attempt to promote the wealth and power of any one country, and to view all as contributing to and drawing from the common stock of the world as a whole. This cosmopolitan habit of mind is also adopted by socialists, who are inclined to disparage patriotic sentiment and to propose a system which takes no account of difference of race and history. But after all, the cosmopolitanism of Free Traders assumed the continued existence of nations; each one of which should be part of a complex system, bound to the other members by ties of commercial connection. It is not quite

* In 1891, when I gave a presidential address to the Economic Section of the British Association at Cardiff on "Nationalism and Cosmopolitanism in Economics" (*Statistical Society's Journal*, liv, 644), I did not realise as clearly as I do now, the grave evils which are inevitably connected with cosmopolitanism, or the practicability of treating the Empire as an economic unit.

clear what the relation of each consumer or nation to the others would be, in a socialist system ; how far each would lead an independent economic life ; or how far there would be trade relations between different communities. In both cases there is a disparagement of patriotism, and the advocacy of something which is regarded as desirable for all men everywhere ; but the relations in socialist systems of the smaller centres of organisation, to one another, and to the whole are not easy to apprehend.

3. Free Traders have been confident that if certain material conditions are introduced, they will react so as to bring about a change of sentiment. It was argued that the mutual interdependence of nations for purposes of trade would tend to create friendly feelings, which would render international quarrels impossible. In a similar fashion the socialist holds that if an equality of condition is imposed, a sense of brotherhood will be developed among all citizens, and that under these circumstances public spirit, instead of individual success, will become an effective motive to induce men to engage in strenuous work. It may perhaps be doubted, especially when we remember the threatened coalition against us at the outbreak of the Boer War, whether fifty years of Free Trade have disarmed all jealousy of this country in the minds of foreigners, or created a sympathetic enthusiasm all over the world for the prosperity of the British Empire ; but even assuming that this has been the case, it can hardly be regarded as certain that a similar love of one's neighbours would be engendered within any community when the transition to socialism is complete. It would hardly be likely to arise till the old order was completely forgotten ; in some minds a sense of injustice would rankle ; in others there might be disillusionment and disappointment ; it does not seem clear that a stronger sense of brotherhood, and desire to engage in self-sacrifice for the common cause would be called forth universally, by the mere force of changed circumstances. There is much to be said for the view that "life develops from within" ; and that an enthusiasm in the heart, however kindled, will act on the will, and find expression in action. But there is little reason to believe that the connection also works in the other direction, and that we can supply material conditions which will inevitably call forth a change of aspiration. At all events, this speculation takes us into the domain of psychology, in which economic science is a learner, not an authority. The principles which are common to Free Traders and to Socialists are not so scientifically established that the vaunted success of

the one system in one part of the world can give us much confidence as to the wisdom of attempting under similar guidance to reconstruct society everywhere.

These deep-seated resemblances are obscured by the fact that Free Traders continue to advocate the doctrine of *laissez faire* in regard to foreign commerce, even when they abandon it in regard to everything else. This maxim, which was adopted by Adam Smith and many of his followers as a counsel as to the best means of attaining opulence, has never been accepted by economists generally, and has been generally discarded in Germany and America, through the influence of List. The extent and manner in which the State can wisely interfere in industrial and commercial life is not to be settled by any formula; it varies with the habits and conditions of each community. The study and co-ordination of actual experience in many lands and many ages is necessary to enable us to take up wisely the task which is enjoined on us by a sense of duty to maintain the heritage of well-ordered political life we have received, and by the desire to plant it in other lands. We are learning to think imperially, and to take the Empire, not the island of Great Britain, as the unit to be considered;* and economics as an empirical science gives us the means of learning from experience as to the best means of developing every part of the Empire, and of encouraging each part to co-operate for the good of the whole. This was the admirable scheme which was thought out by Mr. Wakefield; and with our longer experience and larger knowledge we ought to be able to do much to relieve the congestion and unemployment at home, and at the same time to develop the more backward areas of the British Empire. Imperialists and Socialists are at one in rejecting the doctrine of *laissez faire*, but Imperialists desire to rely on the experience of the past to promote a clearly understood aim, while Socialism is necessarily a leap in the dark; so far as its constructive side goes it can adduce little support from the organised study of experience.

V.

The attraction of Socialism lies not in the reasoning which supports it, but in the hope it holds out and the sense of duty it inspires. It is the form which the enthusiasm for humanity

* Compare my "Plea for the Study of Economic History" in *Economic Review*, ix (January, 1899).

takes in the present day. With a strong sense of the grinding poverty and degradation in which millions of their fellow men are sunk, the generous spirits of our day can hardly fail to be intensely eager to give to every human being the opportunity of developing the best that is in him, and of sharing in the heritage of culture and knowledge that has come to the heirs of all the ages. And this new and eager desire, which so many are hailing as a gospel, seems to have a very intimate relationship with Christianity. That, too, has been an "enthusiasm for humanity"; it cherishes a hope for a new heaven, but it also labours for a new earth. The moral character of Socialism is high, its philanthropy is deep and genuine, as if it had the closest affinity with practical Christianity, so that to many clergy it seems possible to blend the two, and by their combined forces to bring about a new society that shall be better materially and more truly religious. If Socialism can be brought to accept the leadership of Christ, it seems that enormous progress might be made for the ennobling of man and the service of God.

On the other hand it appears that there are many socialists who do not recognise this kinship or desire to strengthen any affinities which may exist between Christianity and the movement they have at heart. They may indeed feel an admiration for the Founder of Christianity, but they believe that the movement He inaugurated has proved a failure, and that it is necessary to give their energies to something else. To their minds Christianity, as it is at the present time, is embodied in powerful institutions closely allied to the social forces which they find most hostile; and they believe that in its true inwardness, Christianity has little or nothing in common with Socialism. Personally I believe that the insight of the non-Christian socialist is not mistaken; whatever superficial resemblances there may be between Christian philanthropy and socialistic schemes, I hold that Christianity is quite inconsistent with socialism as a doctrine of life; and that those Christians who dally with Socialism, are in danger of losing their hold on the very essentials of Christianity.

The forms of Socialism are so various that it is not easy to indicate its essential character in a few words, but in all its shapes it aims at procuring more enjoyment for the mass of individuals—both intellectual and physical—by governmental action and organisation. The range of its vision is bounded by the present world, and it neither knows nor greatly cares what there may be beyond. This attitude of mind is always tempting—Let us eat and drink for to-morrow we die

—but it is not Christian. Christianity holds to a belief in the reality of undying spiritual power; it insists that for every human being to order his life here as the beginning of an immortal life to come is the true way of forming the noblest type of human character. Christianity recognises the joy of life on earth, but does not admit that earth can give the best that man is capable of enjoying; and Christianity, if it is true to itself, must beware of a doctrine which fails to inculcate self-discipline and tends to encourage men to set their affections on things of earth. That the Christian principle of aloofness from mundane things may seem to many to be mere hypocrisy, is true enough; but it is none the less the business of Christians personally to try to make that principle real in their own lives, and to be on their guard against any associations that may weaken it.

The ends in view of Socialism and of Christianity are different, and the proposed means for attaining them are quite distinct. Both aim at an improvement in society, but Socialists try to attain it by compelling other people to do their duty, Christianity by inducing every man to do his own. The method of compulsion is not altogether easy to justify; when it is no longer the suppression of a definite breach of the law of the land, but is dictated by considerations of expediency, it may insensibly become a well-meaning tyranny. In all taxation there is depriving a man of a portion of his property, and many taxpayers are inclined to resent the demand that they should be forced to contribute towards objects of which they do not approve. Nor is it only in connection with the disposal of property that this difficulty arises; in a highly organised State-Socialism it would seem impossible to give much scope to the individual for choosing his own employment or distributing his own time. Perhaps the danger of tyrannical government by a bureaucracy is less formidable than that of bringing about a deterioration of character in those who grow up under a system which gives insufficient scope for initiative and enterprise on the part of individuals. A highly organised society may be in danger of becoming mechanical, and of turning out citizens of one prevailing type.

Christianity, on the other hand, appeals to each individual personally, by holding out an ideal, and stirring up his will; it does not hope to accomplish its object by pressure from without, but by inspiration from within. And thus, while Socialism is not obviously compatible with freedom, and hampers the growth of strenuous personalities, Christianity is

liable to no such charge. Since Christianity endeavours to safeguard the inner freedom of every man, and to encourage the formation of strong personalities, the doctrine of Christ affords a basis for a morality that at once holds out the highest ideal, and points out the method by which we may make progress towards it. The schemes of the Socialist could only bring about the embodiment of current ideals of human life in forms which would be too stereotyped to leave room for further advance.

Since Socialism is inconsistent with Christianity, both in its aims and in the means on which it relies to attain them, there can be little call for the Christian to take an active part in the reconstruction of society on this basis. But reconstruction is hardly in sight at present; the Socialist feels that there is still much to be done in the preliminary work of clearing the ground and breaking the stability of the existing social order. Socialism has a destructive, as well as a constructive side. Those who are unconvinced of the wisdom of socialistic schemes may yet think it possible to go half-way and take an active part in attacking the evils of the day in the hope that something better may eventually be found to take the place of existing institutions. This is the attitude of the anarchist; but it is surely impossible for any one to take this line in the name of Christ; a Christian anarchist seems almost a contradiction in terms. The characteristic feature of Christ's work and life, and of His commission to His followers is the fostering of what is good, so that it may outgrow the evil; He did not commend the action of the Old Testament prophets in calling down fire from Heaven to destroy evil, as if it were worthy of imitation. He did not profess to remedy injustice in the division of an inheritance, and though His followers should, of course, be good citizens, and take their part with Jews, Turks, infidels and others in wise attempts to suppress wrong, it is not specially incumbent on the Christian, as a Christian, to denounce what is evil. Omniscient insight is needed to discriminate the wheat from the tares as they grow together, and human hands are not called to arrogate to themselves the power of taking vengeance on guilt. If constructive socialism is different in aims and in methods from Christian teaching, socialism on its destructive side is wholly alien to the Christian spirit.

As against Socialism, Christianity is to-day the most effective guardian of reliance on personal energy and personal character as powers which can leaven the world with good; and those who deplore the slow progress that is made, who are in danger of losing

heart, and inclined to combine Christian sentiments with socialistic methods, may do well to bear in mind the old warning against undue haste. The delays in realising the Christian aims are partly moral and due to the weakness of human will; but they have also been intellectual. Some portion of the blame must rest with those who, in one age after another, by striving to render Christianity more conformable to current habits of thought, have obscured its spiritual character and lost sight of its spiritual power. We shall do well to be faithful to the trust we have received, rather than allow ourselves to attempt the unworthy task of accommodating Christian aims and efforts to the spirit of the present day.

DISCUSSION.

The paper being concluded, the CHAIRMAN expressed the thanks of the Members and Associates and all those present to Dr. Cunningham for his very able paper on a subject of such pressing and immediate importance.

The Rev. F. E. SPENCER (vicar of All Saints, Haggerston) said :— I propose to say a few words on this subject, and with the Chairman's favour, first, as I have to go immediately. What I have to say is not based specially on books or theories, but upon intimate contact with the people extending over twenty-one years in the East end of London.

The most grievous phenomenon to my mind in recent years has been the rise and spread in our fatherland of atheistic and international Socialism. And the reason at bottom seems to me still more painful. It is a reason not based in its strongest position upon theories or treatises, but upon the actual condition of the industrial classes in this country. It is alleged with only too much ground that Christianity has proved itself a failure to adjust and ameliorate their condition, and on this account it is cast overboard by the stalwarts of a new gospel. Now, I am not a socialist, nor even a Christian socialist. I do not believe in socialist principles. They are largely a gospel of hate; they have no room for patriotism, and they seem to me to be a short cut to tyranny.

They are still open to the attack that Burke brought to bear upon the French Revolution. Burke said: "It is the inability to wrestle with difficulty which has obliged the arbitrary assembly of France to commence their schemes of reform with abolition and total destruction. And to make everything the reverse of what they have been is quite as easy as to destroy. No difficulties occur in what has never been tried. Criticism is almost baffled in discovering the defects of what has not existed, and eager enthusiasm and cheating hope have all the wide field of imagination in which they may expatiate with little or no opposition" (*Reflections*, Clarendon Press, p. 198). But I scarcely think we can fail to record a comparative failure of Christianity in two respects—(1) intellectual, and (2) moral.

1. The Manchester school has surrounded the subject with such complicated perplexities that the intellectual way out has not been found. This perhaps is the most difficult place of the subject. I can scarcely conceive that any Christian man will doubt long that it is the duty of Christians and of a Christian nation to obey what is the great law of spiritual gravitation, which binds all the societies of the universe to the throne of God—"Thou shalt love thy neighbour as thyself," as it has been explained by Christ in the golden rule. But to apply it in practice to the transactions of the market place is a difficulty which has not been intellectually overcome. The man in the street regards the practice of our Church Catechism with a smile of hopelessness or of derision. We are no nearer to an intellectual way out than when Moore Ede gave the Hulsean lectures on this subject in 1896. It is this probably more than anything else which fosters defects in practice. We need an enlightened conscience. There are conspicuous, honourable and well known examples of those who have found a way out, and *found it to pay commercially*. But they are exceptions still, as my long and varied experience tends to prove.

2. The haste to be rich and the gospel of comfort, which characterised the last century, have robbed intellectual investigations in the region of applied Christianity of their sufficient motive.

That at present Christianity is a comparative failure in its industrial application of the golden rule abundantly appears from the following observations, taken from what I am in daily contact

with, and almost at random : (1) the fierce and immoderate competition which rules at present quite *unnecessarily* embitters the existence and probably shortens the life of most who have to do with it. But its special weight falls upon the industrial community. Unreasonable hours, inconsiderate arrangements, and insufficient pay press a large proportion of them down. The conditions of a contract which keep men working in a pit with exhausted air for thirty consecutive hours just outside my door so that they can scarcely crawl ought, for instance, to be amended. There is no one to blame. The conditions are stupid, but perhaps less stupid for those at the top. It is the system as a whole that is a failure ; (2) wages are reduced by competition of aliens ; sweating is as bad as ever. If the Christian intellect cannot find a way out, the unchristian will, with danger to the State ; (3) rent in the centre of large towns is out of proportion to possible wages. Rent in the suburbs is rising, with insanitary conditions. Living at a distance from work results in the insanitary crowding of every available conveyance morning and evening, and the bringing up of working people to the centre, hours before they are needed, with insufficient breakfasts. The effect of this on great numbers of anæmic girls and boys is a danger to the State and to the future generation. (4) Unemployment is at present heartrending—not the unemployment of the worthless, but of the worthy. Things come from abroad that our own people could make better, and are often dumped down at a price which defies honest competition. (5) There is at present a most lamentable wastage in boy and girl life. Industrial conditions make it essential that they should swiftly earn something. In large numbers they take the first little place which opens. By eighteen years of age they are no longer wanted. They are turned into the street without any career to swell the ranks of the unemployed, or even, as I know very painfully, to learn how to steal.

I am convinced that with regard to our own kith and kin, our nearest neighbours, the restoration of the idea of Christian brotherhood, not as a sentiment, but as a practice, is a crying need. It is to such things as these that the highest powers of Christian philosophers, divines and statesmen should be patiently directed. They menace, as it is, much that we all hold dear. If a Christian way out cannot be found an unchristian will, to ultimate disaster.

It is the old problem of conservative reform—not using the word in a purely party sense. The atmosphere of the East end is one of cheerful and patient endurance. But it may not always be so. All around is the *fomes peccati*.

Lieut.-Col. ALVES said: The previous speaker has remarked that Christianity has proved a failure in dealing with social problems. But Christianity (as such) has nothing to do with such problems. Its object is to call out people to form a special body to bear witness by its conduct to those without it that they are not living as God intends us to live.

One cause of failure has been the application of New Testament laws, which form the Church of God, with those of the Old Testament, under which nations live. Another cause has been confusion between the teaching of the first three (synoptic) gospels with the fourth (the Church) gospel.

The synoptic gospels deal with the Kingdom of Israel, which, as a nation, was shortly to be broken up. Getting rid of property was, therefore, only anticipating voluntarily what would, in a few years, be compulsory.

Professor LANGHORNE ORCHARD, M.A., B.Sc.—There is no doubt as to the prevalence, amongst a portion of our population, of much social distress and wretchedness; nor can this be a matter of indifference to a Christian. But, obviously, the misery is not a result from Christianity, it is in spite of Christianity.

Nothing can be more unfair than to attempt to charge it upon Christianity. The Bible bids us love our neighbours as ourselves, and, as we have opportunity, do good unto all men. It is in the carrying out of *these* principles that the true betterment of society is to be sought. Socialism would make matters a thousand times worse than they are. Socialism is the great enemy of Christianity. It has been pointed out* that while Christianity says, "Mine is thine," Socialism says, "Thine is mine." The sole agreement between the two systems lies in a desire to ameliorate society. They differ radically in aims and methods, as the author conclusively shows on p. 82. Socialism† would make no distinction between merit and demerit, between clever and stupid, between industrious and lazy;

* By the late Dr. Adolf Saphir.

† If we may believe some of its influential spokesmen.

and would throw every man's property, including his time, into one common melting pot. And to injustice would be added loss of liberty. The unhappy people would be under the dictatorship of a bureaucracy which would appoint to each man his work, thus affording an instructive commentary upon the boast, "Britons never, never shall be slaves," and suggestive of Israel under Egyptian task-masters.

Socialism, in my judgment, attacks the three great principles of justice which are fundamental to social law, namely, that a man be safe-guarded with respect to his life, his liberty, and his property. Through lack of stimulation to production, Socialism would commercially be injurious to the life of the individual. It would to a great extent rob him of liberty and of property, in which term may be included character, which the author has shown would suffer deterioration. If ever *Socialism* be accepted by justice-loving, freedom-loving, and reflective Englishmen, it will be because they are deceived by their leaders, or as a counsel of despair through an idea that any change is better than none. The awakening and disillusionment will, in such case, be serious, and may be terrible.

We shall, I am sure, thoroughly endorse the learned author's closing remarks, and thank him heartily for his admirable paper.

Mr. H. CHARLEWOOD TURNER said that his experience in social work, mainly amongst working men, had led him to have much sympathy with Socialists, however much he was opposed to their views.

In his opinion they would do little good by denouncing Socialists as robbers, and men urged on only by greed and selfish desires. No one with any practical experience of Socialists and their schemes could make this charge. Undoubtedly, many unscrupulous agitators were advancing their own ends under the guise of Socialism. But on the other hand it was a striking thing that of those men who were keenest on the higher things of life, and most desirous of improving the education and surroundings of themselves and their fellow workers, the majority were Socialists. As to why this was so, he was in absolute agreement with Mr. Spencer of Haggerston.

They had only to look to the results of the present economic system to find the justification of the Socialists. If the followers of the new creed opposed Christianity, and not all of them did, they

opposed not for itself, but on the ground that it had forgotten its ideals, and had allowed the terrible ills of the present day to grow up in Christian lands.

Before condemning men for following the only system that as far as they could see gave them any economic hope, and before setting aside that system as incompatible with Christianity, it was surely their duty as Christians to propound an alternative and a remedy to the existing state of affairs.

REV. SIDNEY PIKE.—I rise to draw attention to two books, *The Problems and Perils of Socialism*,* and *The Triumph of Socialism*.† The latter has on its cover a significant illustration: a man carrying a large sack labelled "Nationalisation," as indicating the vast aims of Socialism; and from a hole in the bottom are dropping out, one after another, "Credit," "Capital," "Trade," "Commerce," "Employment," "National Security," the final outcome of the Socialistic propaganda.

A few quotations from *Problems and Perils* may be given:—

"The chief peril of Socialism is waste—waste both in the moral and in the economic sense. Socialism would not only deteriorate character, but it would lessen product. Our present organisation does provide an incentive to work. Socialism substitutes the much less powerful incentive of coercion, depriving men of their liberty, preventing full-grown men selling their labour at their own price and under their own conditions."

The old Poor Law of 1800–1834 is quoted as an "Experience of an almost complete Socialistic system." "There was State endowment for the old, for the unemployed, for motherhood." "The destruction of family life and family ties was accomplished by the indiscriminate Poor Law relief of those days, *e.g.*, 'A widow with two children, in receipt of three shillings a week from the parish, married a butcher. The allowance was continued. But the butcher and his bride came to the overseer and said that they were not going to keep those children for three shillings a week, and if a further allowance was not made *they should turn them out of doors and throw them on the parish altogether.*'"

On the economic side Mr. Strachey says, as to municipal trading

* By I. St. Loe Strachey.

† By John D. Mayne, Barrister-at-Law.

and nationalisation of railways:—"You place a very large number of men in the paradoxical position of being both employer and employed"; and "Suppose the Government were to nationalise the railways and one or two large industries, say those of mining and shipping. In that case it might be quite possible that the employées in the Post Office, the railways, the mines, the shipping industry, and the Civil Service might be half, or a little more than half, the whole working population. What would then prevent the employées of the Government using their votes to increase their salaries all round? This would not only be an enormous injustice to persons in private employment, who would pay the increased taxes and yet get no benefit themselves; but it might also lead to the bankruptcy of the nation. It seems also extremely unjust that the State or the municipality, having well-nigh inexhaustible resources of taxation, should compete with private individuals."

Finally Mr. Strachey holds up the Roman Empire as a warning which "was not destroyed by the barbarians' armies. Rome fell because her people had been ruined and pauperised by the insidious action of State Socialism."

All, or most, of us here admit the evils of Socialism. It is due in large measure to the unlawful and grinding exactions of employers upon employed. Those revelations made by a previous speaker from his own observation are terrible and demand redress. The fact remains that Socialism is with us and has to be faced. The question therefore is:—"What is the remedy?" I unhesitatingly answer, "The gospel of Christ proclaimed and lived in a loving and sympathetic manner in the midst of the toiling masses." It was a great pleasure to find the author of the paper insist upon the importance and power of Christianity, and its distinguishing difference from Socialism, and a surprise to hear a clergyman say—and repeat it—that "Christianity is a failure." Nay, Christianity has not failed, or to put it in a better way, *Christ* has not failed and never can.

Take a concrete illustration of the benefit and power of a living and practical Christianity. In a poor parish of 6,000 (next to my own in Liverpool), a dignitary of our Church began the work in a cellar with four people present. In a thirty-three years' ministry he had built a church and three mission halls, and carried on a ragged school at a cost of £300 per annum, former pupils from which are now

occupying responsible positions in life. He succeeded in securing 200 fellow-workers, some of whom held open-air services four times a week. The communicants rose to 800; three Bible Women and six Scripture Readers were supplied to Liverpool, and nine men were trained to become clergymen. Let such an example be imitated—where such is not the case—in the East end of London, and in the large towns throughout our land, and Socialism will speedily die of inanition.

Let us hear a converted socialist. “Christ is the solution of all problems. Not Christ with an ‘ism’ attached to His Name, but *Christ Himself*, the living Christ. There is chaos in society, but when the Son of God was sent from the bosom of the Father to reveal the Divine plan, and that plan is rejected by the Church and the world, how can it be other than chaos? Why must professing *Christians* go to atheistic socialism and accept their plans for putting society right, rather than go to the Son of God for His Divine plan.” This was said to a meeting of socialists, who put to the speaker some thirty questions, to which unanswerable replies were given.

Rev. A. IRVING, D.Sc., B.A., made no pretension to speak as an expert on the subject of the paper. Yet it presented in a connected form some well thought-out views on questions which were constantly presenting themselves in a very real and practical way; and as one who had these matters constantly pressed on his attention, he begged to thank Dr. Cunningham for the very able paper to which we had listened, point after point of which would set us thinking more deeply. He had listened with great interest also to some of the remarks of the previous speakers. He did not think that “Socialism,” as it presented itself here in England, was to be met with the thunder of artillery. He agreed that it was utterly devoid of constructive principles; but it was here as a fact, and we were bound to deal with it as an actual factor of modern life. It was based no doubt largely on ignorance, but it gave expression to felt needs and aspirations, which Christianity could neither ignore nor condemn. He ventured to dissent from the learned author of the paper in his contention as to the impossibility of such a thing as “Christian Socialism.” He was rather disposed to hear in “Material Socialism” a warning voice to those who profess the Christian name; calling upon them to consider their ways; to ask themselves whether Christians as a body have understood the true meaning of

Christianity; whether it was not too often forgotten that the central teaching of Jesus Christ was that "it was more blessed to give than to receive"; whether in talking of Christianity we were sufficiently mindful of that *fundamental principle of self-sacrifice*, which its Divine Founder had written in letters of blood across the laws of His Kingdom, when His intense love for His human brethren led Him to pour out His life's blood to redeem men from the tyranny of selfishness, and thus to show them the way. The speaker was inclined to think that there were at the present time hopeful signs of an increasing expansion and growth of that spirit from within the Church; that, as the meaning of the Church, as a Divine Society, came to be better understood, it recognised wider and deeper responsibilities towards the great human brotherhood. As an example of this he referred to the great organisation known as the Church of England Men's Society, founded by the new Archbishop of York. He trusted that Dr. Gordon Lang would carry that with him as an inspiration to the work of the Church among the hard-headed hardworking people of the north; and that it would do something to break down that class-feeling which "Socialism" bitterly and justly resented.

Dr. HEYWOOD SMITH said it was a great pity that learned societies met to discuss important questions, and afterwards nothing practical came of it. We were getting too much cramped up in our tight little island, and it was because there was no room that so much distress, through want of employment, existed. The cry of the socialists was to cheapen things for the sake of the consumer, but what about the producer? There would always be distress through lack of work as long as we allowed the foreigner to dump down his goods here and undersell our own workmen. What we should do was to bring pressure to bear on the Government to carry out a scheme of compulsory emigration. Canada and Australia stood in need of workers, both men and women. Why should we pay rates to maintain a lot of loafers in our workhouses, able-bodied men and women who ought to be made to work and earn their own livelihood? He knew of cases where inmates of our workhouses were willing to work if they could get work; who did work in the workhouse without payment, and yet the guardians put hindrances in their way, and would not let them out, unless at rare intervals, to seek the work they might get.

Professor HULL.—The Chairman considered that the subject so ably dealt with by Canon Cunningham was one of supreme importance at the present time. The large number of capable men out of employment could not fail to draw out the sympathies of us all, and the difficulties of finding a remedy were immense. The Rev. Mr. Pyke had referred to a large plan of Government emigration to our colonies, but he (the speaker) felt strongly that Tariff Reform was by far the most urgent, and most likely to benefit the working classes and the community at large. The important work recently issued on this subject shows that this country is yearly falling behind other manufacturing countries in production; owing to the fact of free imports on our part, and import duties on theirs.* Want of employment necessarily gives rise to discontent and destitution, and induces men to listen to Socialistic schemes for their benefit. The present condition of England is very similar to that of Germany, especially Prussia. In 1873-4, after the close of the great war, when, notwithstanding the enormous inflow of money from France in payment of the indemnity, trade and manufactures were found to fall off there were large numbers of unemployed workmen—and Socialistic ideas and the “Red Monster of Revolution” were spreading amongst the people. Bismarck, the greatest statesman of modern times, found it necessary to examine into the cause of this abnormal state of society, and looking around at the condition of neighbouring states as compared with his own he found that Germany was surrounded by a wall of protective countries, in which German manufactures were submitted to import duties, while Germany itself gave their productions an open door.† With Prince Bismarck to discover an evil was to immediately take measures to remedy it; and he induced his country to adopt measures for tariff reform—by which reciprocal duties were imposed on imported goods from neighbouring states. This has been the policy of Germany ever since—and we all know the result. German manufactures are replacing those of England; and we have even gone so far as to give our coal (our one great natural asset) free to our rivals—wherewith to beat us out of the markets of the world. Can it be wondered at that a condition of

* *Report of the Tariff Commission*, vol. iv (“Engineering Industries”), 1909.

† *Prince Bismarck*, by Charles Lowe, vol. ii, p. 456 *et seq.* (1887).

impoverishment has followed, and that instead of being the centre of manufacturing industries as was the case half a century ago, we have fallen back to a minor position as compared with neighbouring states? Let us adopt the policy of Germany's great statesman and we shall recover our position.

Dr. CUNNINGHAM then expressed his thanks to the Council of the Victoria Institute for having given him this opportunity of setting down his views on this important subject, and all those present for their reception of what he had had to say.

He had been extremely interested in the discussion, particularly in the remarks of Mr. Spencer. He thought there was on the one hand a duty to deal with existing distress, and on the other to try to introduce improvements in the economic system of the country. It was because he believed that a change in the fiscal system of the country would do much to give better conditions and increase the opportunities of welfare—in a way that he did not think Socialism would ever do—that he felt it to be his Christian duty to take an active part on behalf of Tariff Reform.

COMMUNICATIONS.

CHANCELLOR LIAS writes:—No one can help being struck with the pitiable condition of many a worker, as described so forcibly by my friend Mr. Spencer, nor can one dispute for a moment the correctness of his view that as long as things are in the condition he has described so long will Socialists continue to gain a hearing for their theories. If one were disposed to criticise what he said, it would be in the direction of contending that it is not Christianity, but Christians, who are responsible for the condition of many a worker at the present time. Christianity has unquestionably improved the whole condition of the world in thousands of ways. But that improvement has gone on, and is destined to go on, very slowly; God's ways are not our ways. He has eternity to work in, and He takes care to make up to mankind in another world for their sufferings here. But Mr. Spencer is doubtless right in his contention that every Christian will have a heavy account to give in the next world if he does not do all that in him lies to do away with the hardships his poorer brethren are compelled to suffer here.

But there is one question which ought first to be asked, and which I have seldom seen asked when Socialism is discussed. *What is Socialism?* We should surely commence with definitions. I am an outsider, not an expert. But am I wrong in supposing that Socialism properly means the subordination of the individual to the community. If this be so, then Socialism is only a question of degree. Society without a certain amount of Socialism is an impossibility. We have Socialism now. Every law, every tax, every army, every prison, every policeman, is a Socialistic institution. And the only practical question for us is, how far shall Socialism be carried? We English have found that the further, within certain limits, the rights of the individual can be allowed to extend, the greater the prosperity our country enjoys. It seems pretty clear that we have carried it rather *too* far, and that we should be better off if some more restraints were put on individual liberty. But there can be little doubt that if we went to the opposite extreme, we should be infinitely worse off, as long as human nature remains what it is. My friend the Archdeacon gave a guarded approval of the municipalisation so much in fashion just now. But it is exposed, in the present condition of humanity, to two very serious dangers. First, the principle of popular election will not always provide us with the men most fitted to manage our affairs, and next, as hundreds of instances have of late made plain to us, we cannot get rid of unfair partiality and of corruption in the action of municipal and other bodies. It would, as the Archdeacon reminds us, be the extreme of folly to place ourselves under the control of a handful of men, who by reason of the incompetency of the individual elector to form a sound judgment, will in all probability be found more or less unfit for the responsible task entrusted to them. The impulse of self-interest and regard for one's family has, since the world began, been the strongest incentive to individual and social well-being. And the Archdeacon well reminds us of the deadening effect on a growing child of destroying all hope and spring in its life by the knowledge that he cannot follow the bent of his own nature, but must be bound hand and foot and all his native impulses crushed by the irresistible despotism of an all-powerful governing body. The Archdeacon tells us of the hope of benefiting his kind that animates the Socialist. But that hope may reasonably be balanced by a well-grounded fear that the

absolute rule of the many over the few, even if those few be chosen by the many, will be found the most grinding and penetrating despotism that has ever been known since the creation of man.

Mr. J. SCHWARTZ, Jun., writes :—A considerable number of fellow Christians would strongly dissent from the lecturer's sweeping statements that "Socialism is inconsistent with Christianity" and that "Christian anarchist seems almost a contradiction in terms."

If Christ's teachings on social obligations to His generation are taken to be of universal application then Tolstoy's deductions of passive anarchism and other systems of Christian communism are unanswerable. I think them mistaken because they underrate the limitations imposed by Christ's manhood : His teaching, although subject as regards worldly knowledge, to the limitations of a Galilean peasant, is most wise as applied to the then existing conditions. Interest on money He condemned because then, as still in the East, it was wickedly usurious. Property then was the result of force or fraud, not of industry and ability, and He said that it should be given up. How wise a saying was "Resist not evil" to the turbulent Jews hopelessly under the heel of the tyranny of Rome ; what misery would they have avoided had they followed it.

These teachings Christ did not intend to apply to a self-governed modern state of which probably He had not the least conception. The communistic community of the early Church was the natural outcome of the mistaken notion of the speedy end of the world and not an example for all time. At the end of the tenth century, when Satan was expected to be let loose, a somewhat similar position was created in mediæval Europe.

The power of Christ for all time is in His spiritual teaching and ideal personality as ably put by our lecturer. All right-minded people who know the facts, deplore the inequalities of wealth and opportunity that have grown up. If the personal character of all or even if a majority conformed to Christ's teaching, it would be quite immaterial whether there was a socialistic or individualistic form of society, all would be well.

In dealing with the masses in their present state of moral and mental development the rugged virtues of sturdy independence and the pluck with which they face their difficulties would soon wither away under the blight of grandmotherly influence.

The sensitive sentimental natures who inaugurate such movements

would soon be elbowed out by the glib-tongued materialistic demagogues, who would tickle the vanity and excite the greed of the lower strata of the poor. History would repeat itself. The Girondins of the French Revolution were thus supplanted by the Jacobins, followed by chaos, bloodshed and the old order re-established.

Social amelioration must be gradual. The immediate doubling of working class incomes, a boon to many, would, I am convinced, show an evil balance of increased drunkenness, gambling, crime, and laziness. If anyone doubts it let him go round the public houses on a Saturday night (pay day).

All who desire to raise humanity must work hard and intelligently and be satisfied if they see slow progress; they must speak boldly against the canker of ostentatious vulgar luxury, and the feminine craze of fashion and overdressing; they must cultivate the simple life and intellectual pleasures: strengthen the law against financial thimble rigging, and wisely tone down the injustices of the past without shattering the social fabric.

Colonel ALVES writes:—I have for many years been in favour of Tariff Reform with a view to the protection of our home industries and those of our dependencies. This is seen by many. But what I do not see commented on, and what I believe to be equally important, is the attitude of Trades Unions which, beginning as protectors of the wage earners, have now become the tyrannical masters of the employers. Until their power for evil is curtailed, I do not think that even Tariff Reform will do us any great good.

We can see this amongst the leaders of the unemployed:—"Find them work, but you must give them the Trades Union rate of wages." The Socialists' theory is:—"The wage receivers do all the work, and should receive all the profits, but never make good the losses"; and the Socialists are capturing the Trades Unions.

The Trades Union policy for many years has been that of reducing activity and skill to the level of laziness and clumsiness, with a view to "spreading-out" work over as large a surface as possible. This is one of the most mischievous forms of Socialism, tending, as it does, to the debasement of character.

I fear that many of our workers amongst the poor, having more benevolence than judgment and firmness, have been great, though involuntary, workers of mischief, through failing to realise that life is a very serious war, a war waged largely in the old way by men

clad in defensive armour and using hand-to-hand weapons. Courage, skill and discipline combined, contribute now in peace as of old in war, to the safety of the warrior who, returning in safety and honour, claimed the hand of the maiden he loved.

Now, the mere fact of an unemployable having a wife of like character and a family (such families are usually large) of children probably more degenerate than their parents, is thought by many sentimentalists to give such unemployable a right to permanent employment.

To animals, God said, "Be fruitful and multiply"; but nature destroys the unfit; and if food is scarce, the stronger let the weaker starve.

To man God says, "Increase and multiply, and replenish the earth and subdue it." This is two-fold, joined together by God, and recognised by many heathens.

If, then, men will only act as animals, I do not see that Christians, acting in their national capacity, are justified in bolstering up such to swamp the nation with undesirables who may, by intermarriage with better stocks, deteriorate the whole nation. Such bolstering up can only end in national bankruptcy, moral and financial.

In my judgment, honourable imprisonment for life, with complete segregation from the other sex, is the only remedy for this evil. Such a course should entail no great hardship, for it is well known to phrenologists that the sexual instinct ("increase and multiply") is closely allied to the driving faculties ("replenish the earth").

There are doubtless other causes operating connected with the land, feudal rights divorced from feudal duties; the laws of succession which, in England, are not in accordance with God's Old Testament laws as regards estate, either real or personal; and perhaps other disagreeable hard facts; all of which must be faced.

492ND ORDINARY GENERAL MEETING.

MONDAY, FEBRUARY 15TH, 1909.

LIEUT.-GENERAL SIR HENRY GEARY, K.C.B. (V.P.)
IN THE CHAIR.

The Minutes of the previous Meeting were read and confirmed, and the following candidate elected as an Associate of the Institute :—

Herr Pastor Flügel, Germany.

The following paper, illustrated by lantern slides, was then read by the Author :—

*DISCOVERIES IN BABYLONIA AND THE NEIGH-
BOURING LANDS.* By THEOPHILUS G. PINCHES,
LL.D., M.R.A.S.

GRADUALLY, but surely and ever more speedily, Assyriology is becoming the most important study in the domain of Oriental archæology. The language of the Babylonians and Assyrians proves to be a tongue of the most engrossing importance, whilst that of the seemingly earlier race—the Sumerians—with which it was brought into contact, is regarded by some as the coming study for those who wish to acquire renown as true archæological linguists. But besides the languages, with their dialects, a very specially interesting and important field of study is their archæology in general, their beliefs, their manners and customs, their arts and sciences, and the geography of the land. Whether we shall ever obtain information as to their original home, we do not know, but we may, by chance, acquire, ultimately, the information needed to find out where that place may have been ; and in any case, we shall know all the better what influence those nations may have had in the world, to say nothing of the bearing of their records on the all-important subject of Bible history, thought, and beliefs. A number of closely-connected nations whose influence extended from Elam on the east to the Mediterranean

and Egypt on the west, and from the Caspian Sea on the north to Arabia on the south, cannot fail to have exercised considerable influence beyond those borders and boundaries—an influence of which we shall not obtain a full idea for many years to come.

Now that we have learned so much about these ancient nations, and their peculiar wedge-formed characters, we know also something of their power and the wide influence of their writing. It is now known that the so-called Phœnician goes back to 1,500 or 2,000 years before Christ, but there was a time when the cuneiform script, in one form or other, was used all over Western Asia within the limits I have indicated. In addition, therefore, to Semitic Babylonian, the cuneiform script, derived from that of Babylonia, was used by the Assyrians, who spoke the same language; the Elamites, who spoke Babylonian and ancient Elamite; the Armenians, who seem to have obtained the syllabary they used from Assyria; the Palestinian states, who got their script from Babylonia; the Mitannians, who also employed the Babylonian style; the Cappadocians, who at first used ancient Babylonian, though they seem to have been an Assyrian colony; and the Hittites, who also used the Babylonian style. These are the nationalities who are known to have used some form of the Babylonian wedge-writing, and the list omits ancient Persian on account of the impossibility of tracing any sure connection between their cuneiform alphabet (for that is, perhaps, the best word to use) and the complicated characters of the Babylonians and Assyrians. It will thus be seen, that the cuneiform script, forming, as it does, the medium of communication between so many different peoples of ancient times, is of the utmost importance—indeed, attempts have been made to connect it with the ancient Phœnician, and, through that script, with our writing at the present day. This is not generally accepted, but probably offers, in some cases, comparisons as satisfactory as those obtained with the Egyptian hieroglyphics through the Demotic forms. In addition to the nationalities mentioned above as users of the cuneiform style of writing the inscriptions mention the languages of Šu and Suḫ (the tongue of the Shuhites of Job ii, 11, etc.), the Kassites, and the Lulubites.

But the discovery of new languages, or dialects, or new styles of writing, is not yet over, as is shown by the French excavations at Susa. On that interesting site they have found not only a number of Elamite and Babylonian inscriptions in the wedge-formed writing, but also several in a new style, not

cuneiform, though the characters may have assumed that peculiarity, under Babylonian influence, about 3,000 years before Christ. Among the specimens which I now show we have the line-forms as seen on a stone bearing the name of Karibu-ša-Sušinak* (the first element, *karibu*, is a provisional reading), and to this I add a copy in ink to show more clearly the rough forms of the characters and the careless cutting of the lines, which ought to have been ruled. The following is the suggested translation of this inscription, by Professor Scheil, the original being, as already indicated, in proto-Elamite:—

“Offerings of food, fermented drink, . . . and dates: 20 measures of sweet drink, . . . 2 measures of date-wine, 20 measures of seed-oil, 1 measure of fermented drink, a kind of fish, 1 sixth of a measure of dates (for) food, . . . 100 measures of sweet food (?), . . . 3 measures of fine *šip*-drink, 100 . . . 1 sixth of *hal*.”

This inscription, if rightly rendered in the main, reminds one of the numerous tablets recording gifts or contributions of drink, food, and oil, which have been found at Lagaš (Tel-Loh), in southern Babylonia. The rendering (which I have modified from that of Scheil) is based on a likeness of certain of the characters with the line-forms of the early Babylonian script; but whether we are right in assuming that one is derived from the other or not, I do not know. Though defective, the translation may be regarded as better than none at all. The inscription on the other piece, which has the advantage of being larger and clearer, is very similar to that of which a translation has been attempted, and is probably the same text, with variants.

In addition to these roughly-carved lapidary inscriptions, however, a large number of small clay tablets have been found, apparently forming part of the records of income and outlay of some institution or temple. All these texts are written in narrow columns which, like those of the line-inscriptions, also read downwards, but the style is not linear, but distinctly cuneiform. I give here a drawing of one of them, made from

* The following is a free rendering of the inscription, which is written in the cuneiform character:—

“Karibu-ša-Sušinak, viceroy of Susa, governor of the land of Elam, son of Simbišhuk, has dedicated the cedar and bronze gate-bar to Šušinak his lord. May Šušinak, Istar, Naruṭe (and) Nergal, remove the foundation and destroy the seed of any who takes this inscription away. The name of the gate is ‘The support of this house.’” According to Scheil, the date of this ruler should be about 2500 B.C.

the photographic reproduction with the aid of M. E. Lampre's copy. Prof. Scheil's translation, somewhat modified, reads as follows:—

“Tablet of TU-KAK, 17 DA-NUN-SI, 1 AD-, . . 2 ME, 4 BAD, 1003 and a half DUG (?)—BAD, 9 measures of grain, $9\frac{3}{4}$ measures of grain, 2 DUG-GAL.”

The last is probably a kind of large fish.

With reference to the inscriptions of this nature, however, it is needful to say, that one has an uneasy feeling that the characters may not have been pronounced as the Babylonians read them, and that often, when we can translate the words, we do not know their phonetic values, and when we can transcribe them, we do not know their meaning. When this happens, there is no escape from leaving blanks in the renderings, or giving the apparent pronunciations of the somewhat barbarous combinations which the Babylonian syllabaries indicate. With regard to the numerals, their renderings may be looked upon as fairly certain.

Besides this small text in four columns, the other inscriptions of the series also give numerous forms comparable with those of the script of Babylonia and Assyria,—which, however, seems to have been less rich in signs—due, probably, to the abandonment of some of the original forms, for fashion existed in the domain of Babylonian letters as in other things. I give here, as examples, a few comparisons which may be made between proto-Elamite and the Babylonian styles of writing. The first is a group of doubtful meaning; the second is the character for “husband” or “wife”; the third stands for “lady” or “sister”; the fourth is a compound group showing the character *lum*, “to be luxuriant,” within *ak*, “to make”—? “garden-produce,” perhaps of some special kind; the fifth is a character for “sheep,”—apparently the picture of a sheepfold with four divisions; the sixth is the character for “grass” or “herb”; the seventh gives three forms of the character for “great”; and the eighth is a measure called the *qa*. It is needless to say that this list could be greatly increased, but were I to continue the comparisons, we should not reach the more interesting things to which I shall refer in this paper.

But even at Babylon itself at least one linguistic mystery came to light. In 1881 Mr. Rassam found there a contract-tablet referring to the sale, by merchants or tradesmen of that city, of a slave-woman named Ištar-Bâbili-šimînni, to a man named Urmanû. This text I published in 1883 on account of

the strange characters with which the spaces were filled, hoping that some scholar, more versed in strange writings than I was, might find the key to its interpretation. More than a quarter of a century has passed since that publication, but we are no nearer to the finding of an explanation of these mystic signs. Is it a late form of proto-Elamite? or may it be cursive Hittite? Time alone can show.

Most of the tablets bearing these archaic Elamite accounts are small, and measure only a few inches. One of them, however, is so large that it occupies a whole page (quarto) in the great French publication where they are reproduced. The obverse has only two lines of writing, but bears, in two long rows, the impressions of a cylinder-seal, the design of which is repeated, by continuing the impression, about three times in each row. The subject shows a bull, front-face, horned, standing erect manwise, and holding two sitting lions by the ears. A lion in the same position, but profile instead of front-face, holds, by their humps, two humped bulls, the whole making a somewhat grotesque design. The strange character in the field is probably the Babylonian sign for a vase used for offerings, with additions. As in other cases, these seal-impressions are probably from the engraved cylinder of the scribe who wrote the tablet.

Among the artistic discoveries are some excellent examples, in some cases superior even to the work produced by the Babylonians at the period. The most interesting is probably that representing the Babylonian king Narâm-Sîn, ruler of Agadé, marching over the mountains in his victorious course. Naturally, there is doubt whether this is Elamite or Babylonian, but it is to be noted that the style reminds one of the Elamite bronze representing marching warriors, which would seem certainly to have been real Elamite work, and this being the case, it is not unlikely that the relief showing Narâm-Sîn is Elamite too. It is known that his father, Šargani, or Sargon of Agadé, conquered Elam, but that the dominion of the country passed to his son is uncertain. Whether this monument may be regarded as evidence in favour of that probability I leave to the judgment of my audience.

Another interesting piece of artistic work is the bas-relief representing a woman spinning. She is seated tailor-wise on a large stool before a table covered with wool, whilst a serving-maid behind keeps off the flies, and fans her mistress with a large fan of square form, which she holds. This is in all probability a representation of a woman of the higher classes,

and is interesting as giving a glimpse into Elamite domestic life. The style is probably late, the figures being more thick-set than in the case of the stele of Narâm-Sin and the bronze relief showing marching soldiers. The thick-set type appears in Babylonia about 1200 B.C. The marching soldiers, however, are attributed by Father Scheil to the reign of Šutruk-Nahunta, about 1116 B.C., so that it would seem doubtful whether the date can be decided from the type of the figures.

Religious subjects also occur, a good example being the small relief which has already been thrown on the screen with the proto-Elamite line-inscriptions. This shows the remains of an enormous lion's head, open-jawed, with one forepaw. Kneeling on one knee, and facing the animal, is a deity in a horned hat, holding with both hands a large cone, apparently brought as an offering. Figures similar to this, cast in bronze, in the round, have been found in Babylonia, and are sometimes called "the god with the firestick." They come from Tel-loh, the ancient Lagaš, and bear an inscription of the renowned viceroy of that city, Gudea.

It is needless to say, that all these and many other objects of great importance, found at Susa, the ancient capital of Elam, prove the power of that kingdom in ancient times, and show that such a campaign as Chedorlaomer, in the fourteenth chapter of Genesis, is represented as making about 2000 years B.C., is not only possible, but highly probable. With many vicissitudes, she maintained her power until the time of Tepti-Īmban, the Teumman of the inscriptions of the Assyrian King Aššur banī-āpli (about 650 B.C.), "the great and noble Asnapper," who intent on absolute supremacy in the East, attacked Elam in three great expeditions, and reduced the country, as he records, to a pitiable state. Having lost her political importance, though not her courage and energy, as still later accounts show, she ceased to attract the historian and traveller, who therefore, to all appearance, passed her over in favour of Nineveh, the capital of the power which had crushed her, and Babylon, the capital of Babylonia, her old ally and foe, by turns. It is only during the reign of the Kharacenian King Hyaspasines that the cry of "the enemy, the Elamite," is once again heard in Babylonia, though this was probably only for a short time. Notwithstanding all the wonderful finds that have been made, much more material is required to complete our records, and not among the least interesting would be those referring to the latest period, but documents of every kind will, it is needless to say, be welcomed.

Turning to Elam's western neighbour, Babylonia, we find again that much has been done, this time by the Germans, whose discoveries on the site of Babylon practically make the city live once more, and the time is not far distant when it will be the objective of the modern tourist as much, for instance, as the cities of India with their wonderful remains. According to Delitzsch, Babylon was a comparatively small city, not larger, in his opinion, than Dresden or Munich. The outer wall is shown by the plan now on the screen. At the top is the north palace on the east of the Euphrates, which at present flows from the north-west. Some distance down begins the Arah-tu-canal, which, running in a southerly direction, passed through the southern wall and entered the Euphrates again near the point where it began to resume its southern course. The wall on the left bank of the river was continued on the right bank, and has, on its north side, the middle palace, and on its south the south palace. At this point lie the ruins of the Istar-gate, near the east end of which is the temple called Ê-mah. Canals protected the two adjoining palaces on the north and the south, the former being called the Merodach-canal, and the latter Libil-hegala, "(the canal) 'may it bring fertility.'" The square some distance south of the south palace marks the position of the great temple-tower Ê-temen-an-ki, "the House of the foundation of Heaven and Earth," explained by the Babylonians as "the Tower of Babylon." South of that lie the ruins of the great temple Ê-sagila, the renowned Temple of Belus. Running parallel with the Arah-tu-canal is the royal street, called, at its northern end, Aa-ibur-sabû. This was used for processions, especially that of the New Year, when the gods were solemnly taken to greet their king, Merodach, as one of the inscriptions brought back from Babylonia by the late George Smith states. The ceremonies at these New Year festivities apparently symbolize the visit of the king of the heavenly host to the captive gods, whom he comforted and released, much to the discontent of Nergal, god of war and disease, and also, as we may suppose, of death—whether he was identical with Ugga, the god of death *par excellence* or not, we do not at present know. The gods in prison were the followers of Tiawath, the Dragon of Chaos at the beginning of the world, and when Merodach destroyed her—the Dragon—her followers were placed in prison and bound. This ceremony of the release of the captive gods took place on the 8th of Nisan, the first month of the Babylonian year, corresponding partly with March and April. At the same time

“The gods, all of them—the gods of
 Borsippa, Cuthah, Kiš,
 and the gods of the cities all,
 to take the hands of Kayanu (and) the great lord Merodach,
 shall go to Babylon, and with him
 at the new year’s festival, in the sanctuary of the king,
 offer gifts before them.”

It is also probable that on the same occasion the ruling king of Babylon, whoever he might be, and of whatever faith or nationality (for the Babylonians had been ruled in their time by aliens from all parts of the east), was expected to “take the hand of Bêl,” though it may be doubted whether Darius Hystaspis, that stern worshipper of Hormuzd, ever consented to assist in what he must have regarded as a heathen ceremony. This street for the sacred processions in Babylon must, therefore, be regarded as having been the most noted roadway in the city, and we can imagine the long procession passing through the southern gateways, taking part in the ceremonies in the temple of Belus and at the Tower of Babylon connected therewith, crossing the Libil-hengala canal, then passing the royal palace and under the gateway of Ištar, to the Chamber of Fate, which is regarded as having been situated at the eastern end of the Merodach canal. The distance from the gate of Uraš, which was the city’s southern entrance to the Chamber of Fate, was a little over a mile and a quarter. Unfortunately, the remains of the Tower of Babel—that structure so renowned of old—have, within recent years, been cleared away to build the dam of the Hindiyyeh Canal, and instead of a great monument, the depression where its foundations were laid is now all that exists.

As might be expected, the spouse of Merodach, Zêr-panitum, the principal goddess of the Babylonian pantheon, came in for a share of the honours. She appears to have been worshipped at the Tower of Babel along with him, but besides this she had a temple of her own on the east of the Ištar gate, and its foundations still exist in a fairly complete state. This rough photograph, made up of several smaller pictures kindly lent me by permission of the German Orient-Gesellschaft, shows the north front with the altar before one of the recesses. This is the celebrated Ê-maḥ, “the supreme temple,” dedicated to Nin-maḥ, “the supreme lady,” as Zêr-panitum was also called. The larger picture on the next slide is stated to be the north-west corner of this temple—apparently the interior—with an altar and platform, and another picture shows the exterior of the

same corner. It is naturally difficult to get a good idea of these ruins from the imperfect reproductions which I am now showing, but they will probably be regarded as better than nothing. Enthusiasts will easily imagine what an interesting spot this would be to visit, with its sites from which the glory departed so many hundred years ago.

In the plan of Babylon which has been thrown on the screen, it will have been noticed that the form of the basement of the "Tower of Babylon" is square, whilst the old representations of that structure, which many of us have seen in old family Bibles and elsewhere, show it as having been circular in form, and tapering with a spiral ascent until the top was reached. These designs, however, were probably mere creations of the artist, who wished to produce something picturesque, and copied, perhaps, some drawing or description which he had met with of similar spiral towers of later date, which actually occur in the East as minarets of certain mosques. This, however, was not the shape of the Tower of Babel, which, as we know from the remains found in the country as well as from the ancient descriptions of the structure, was square in form, though the ascent was an inclined one, and though arranged the same way, was straight instead of curved. The picture now on the screen, which is taken from the boundary stone of the time of Merodach-Baladan I., who reigned about 1167 B.C. (this object was presented to the British Museum by the proprietors of the *Daily Telegraph*), seems to show an erection of this kind in three stages, with a shrine at the top. The horned animal or dragon in front apparently bears on its back a form of the wedge, the symbol of the god Nebo, so that it is possible that the staged tower behind may have stood for one of the emblems of that god. This would naturally form a reason for identifying the great temple-tower of Nebo at Borsippa (the Birs Nimroud) with the Tower of Babel, which is the traditional site of that erection. In all probability, however, the reason for placing the Tower of Babel in "the second Babylon," as Borsippa was called, and not in Babylon proper, lies in the fact that the temple of Nebo at Borsippa was the latest shrine where the ancient Babylonian worship was carried on.

The form of temple-tower suggested by Perrot and Chipiez, in their *History of Art in Antiquity*, was either with sloping stages, as in the case now shown, or with a double ascent and level stages, as in their alternative design. It is doubtful, however, whether the Babylonian architects, notwithstanding

their skill, had ever hit upon so elegant a form. The description published by the late G. Smith in the *Athenæum* of February 12th, 1876, however, makes the lowest stage to be the greatest in height. Doubt may be expressed as to the outside inclined ascent, with its step-gradines, but some sort of protection would be needed against the accident of falling over the edge, and it is not at all improbable that such a thing existed, as in the case of the temple-tower at Dûr-Sargina (Khorsabad), where the French excavations which preceded Layard's were made. According to Sir H. Layard, moreover, a temple-tower somewhat of this form existed in the city of Calah (Nimroud), and is depicted in the somewhat fanciful restoration prefixed to his *Monuments of Nineveh*. A modification of my original design would, however, in all probability, be desirable; there was probably no ascent clinging, as it were, to the first stage, the top of which would be reached by a central staircase at right angles. Similar erections are described as existing in Chinese Turkestan by the traveller, Dr. von Le Coq.

It is a great pity that we cannot appeal to the remains of the monument itself to settle the above question, as well as that of the existence of chambers within. According to Dr. Weissbach, however, the structure measured about 309 feet each way, and the height was about the same. Though this is only a third of the height of the Eiffel Tower in Paris, it is still sufficiently imposing as a high monument. As will be seen from the picture, the lowest stage was much higher than any of the others. The topmost stage was the upper temple or sanctuary of the god Bel or Merodach, 80 feet long, 70 feet broad and 50 feet high—a hall of considerable size. Full details concerning the structure were inscribed on a tablet which the late G. Smith had in his hands about thirty-five years ago, and which has apparently not been seen since. From the description of its contents which that scholar gave, it would seem to have been a document of the first importance, and it is needless to say, that we should all like to come across it again. Comparatively little publicity has as yet been given to the fact that it is wanting, and it is hoped that if the present owner should hear that inquiries have been made, he will be so kind as to produce it so that it may be studied and the results given to the world. Mr. G. Smith, at the time he published his description of the document, was about to start for the East, and it seems probable, therefore, that he saw it in this country. It may, indeed, have been offered for sale by a dealer and been sold by that dealer to its present possessor. It seems to have been

a moderately large and fairly complete document, divided into paragraphs, probably by ruled lines.

Cylinders with inscriptions of Nabopolassar are said to have been found on the site when the remains of the Tower of Babylon were carted away some years ago, and in the interesting text which they bear, the king seems to say that it was not until after he had overthrown the power of Šubartu (probably Assyria), which took place in the year 606 B.C., that he turned his attention to the rebuilding of *Ê-temen-an-ki*, "the House of the Foundation of Heaven and Earth," which he further describes, as does also his son Nebuchadnezzar later on as "the tower of Babylon." Nabopolassar died two years later, so that the rebuilding during his reign is reduced to within exceedingly narrow limits. The implements used in the rebuilding of the structure were of an exceedingly costly nature—nothing was too good for the reconstruction of the great temple-tower dedicated to Merodach. It is worthy of note, also, that the tower was to rival the heavens in height, whilst its foundations were regarded as having been placed "on the breast of the underworld." The "stages" seem to be referred to, and at the rear were apparently sanctuaries to Šamaš, Hadad and Merodach (these are not mentioned in G. Smith's description, though it is implied therein that the couch and golden throne of Merodach, referred to by Herodotus, were in the temple buildings on the western side of the tower). The gold, silver and other precious things which Nabopolassar states that he deposited in the foundations must have disappeared many centuries ago, together with the figure of the king carrying a workman's basket similar, in all probability, to those in the British Museum, representing Aššur-banî-âpli and his brother Šamaš-šum-ukîn doing the same thing. These were carved to commemorate the restoration, by those rulers, of the temple of Nebo within Babylon, possibly one of the shrines on the eastern side of the tower.

Besides Nabopolassar, Nebuchadnezzar, his eldest son (who, two years later, succeeded him on the throne of Babylon), took earth, with offerings of wine, sesame-oil, and produce in (it may be supposed) one of the golden baskets which are referred to in the inscription, whilst his brother, Nabû-šum-lišir, took a rope and a wagon, in which Nabopolassar had placed a basket of gold and silver, and offered it—or him, his darling (*dudua*)—to the god Merodach. Was this a case of the redemption of the firstborn, and the substitution of his brother, with a gift, in his place? We do not know, and, to say the truth, it seems unlikely, as the kingly office did not prevent him who held it

from becoming priest as well as king—indeed, the “great king” was often, at the same time, the great high priest.

Nebuchadnezzar also added to the splendour of this great fane, the type and token of Babylon’s greatness. All kinds of precious things were offered by him in Ê-sagila, the great temple of Belus adjoining on the south. He also “raised the head” of Ê-temen-an-ki with burnt brick and white-mottled lapis. After relating all he had done for the adornment of Babylon, the great king goes on to say, that “from Du-azaga, the place of the Fates, the shrine of the Fates, as far as Aa-ibur-šabum, the causeway of Babylon, before the gate of my lady (probably Zēr-panitum), with small decorated tiles as the procession-street of Merodach he had decorated the path.”

Here Nebuchadnezzar describes the building and restoration of the walls of the city, and then continues:—

“Aa-ibur-šabum, the causeway of Babylon, for the procession street of the great Lord Merodach as a high terrace I filled in, and with small decorated tiles and blocks from a mountain-quarry I perfected Aa-ibur-šabum from the Holy Gate as far as Istar-sakipat-têbi-ša Street, for the procession-street of his godhead. And I connected (it) with what my father had made, and beautified the road Istar-sakipat-têbi-ša.”

Though Nebuchadnezzar’s description of his many works at Babylon is somewhat tedious to read, it is really very interesting when taken in connection with the ruins themselves, and there is no doubt that the German explorers of the site of the city will procure for students much more material for comparison as time goes on.

Although we, in this country, have not done much—at least no account of British excavations has, of late years, been published, as far as my knowledge goes—our kinsmen over the sea, the Americans, have made some most successful researches in Babylonia. The site which they have more especially explored is that known as Niffer (they say that the word is at present pronounced Noufar), the ancient Nippur (Niffur). This site the Rabbins identified with the Calneh of the tenth chapter of Genesis, which is mentioned after Babel, Erech, and Akkad, as one of the first cities of Nimrod’s (*i.e.*, Merodach’s) kingdom.

Niffer lies on the eastern bank of the Euphrates, but at a distance of about 30 miles from the present course of that river, on the now waterless canal known as the Shatt-en-Nil, which divides it into two parts. Layard and Loftus give interesting descriptions of the ruin-mounds of this great Babylonian city. It is in the north-east corner of its extensive

ruins that the remains of the great tower, resembling that of Babylon, arise. The old Sumerian name of this structure was Ê-kura, probably meaning "the temple of the land," though "Temple of the mountain" (or "Mountain-Temple") is also a possible rendering. It was dedicated to Enlila, who was called "the older Bêl," *i.e.* not Bel-Merodach, but his divine grandfather. The antiquity of this town and temple was regarded by the Babylonians as being as great as that of the world itself, for the tradition was that Merodach built or created both in the beginning, when Babylon, Erech, and Êridu also came into existence. Professor Hilprecht describes this structure as attaining even now a height of 96 feet above the level of the plain on which the city stood, and around lie the fallen walls and buried houses which originally occupied its precincts. The erections here are of various dates, and extend back as far as 2800 years B.C. or earlier.

What the original height of the tower may have been we have no means of ascertaining, but in form it was a tower in stages, like those at Babylon, Borsippa, and elsewhere. Traces of three platforms were laid bare, and Professor Hilprecht says that no remains of a fourth could be detected, and that the accumulations of rubbish on the top were not sufficient to warrant the supposition that there had been ever more than that number. This, however, is naturally a point which is open to discussion. It is needless to say that, in the days of Babylonia's prosperity, the kings each vied with their predecessors in restoring and perfecting the structure, and changes in its form—slight ones, in all probability—seem to have been made from time to time, the kings who effected them having been Sargon of Agadé, Narâm-Sin, his son, Sur-Engur (2800 B.C.), Dungi, Sur-Ninib, Bûr-Sin, Išmê-Dagan, Kuri-galzu (1400 B.C.), Addu-šum-ušur (about 900 B.C.), Esar-haddon (681 B.C.), and others, down to an unknown restorer of the structure 500 B.C. or later.

And here it is worthy of note, that though in the tenth chapter of Genesis the ancient Babylonians are represented as proposing to make brick, and burn them thoroughly, this latter precaution against decay was not always taken, not only here, but also in other places, for the whole seems to have been constructed of small crude bricks, except on the S.E. side of the lowest stage, which was faced with burnt brick of the same size. On each side of the structure, however, were channels of burnt brick to carry off the rain-water, and all four sides were plastered with bitumen in such a way that they sloped gradually

outwards towards a gutter which carried the water away. The corners were adjusted roughly to the four cardinal points. The entrance was on the S.E. side, between two walls of burnt brick of the time of Sur-Engur, which led up, apparently by an inclined plain, to the courtyard, which was a large raised platform. It is stated by the explorers that this platform assumed the form of a cross, by the addition of long extensions resembling buttresses. Many parts are curiously irregular in shape, and the angles of both enclosure and *ziggurat* (as these temple-towers were called) are not correctly placed, the northern corner of the latter pointing six degrees E. of the magnetic north.

Besides this great structure so closely connected with their religion, many other noteworthy constructions were found—walls, defences, towers, and courts—but not the least interesting were the remains of the houses of the people. A picture from a sketch by Mr. Meyer, published by the Rev. J. P. Peters, the originator of the explorations on the site, shows, in perspective, one of the streets of the city. It looks towards the S.S.W., and runs along the S.E. buttress of the temple-tower. In the middle of the unpaved street is a well-made gutter of burned brick, showing that some provision had been made to free the street of water. As to keeping the street clean, however, that was another matter, and accumulations of rubbish seem to have been allowed to such an extent, that at last, instead of going up a step to enter a house, they had to make a little stairway to enable it to be entered from above. In all probability, therefore, little or no scavenging took place in this ancient city. Notwithstanding that there was much, from our point of view, which was sordid in the cities of Babylonia, the people of the land thought a great deal of them, and found them to be full of poetry and charm. The reason of this was, that they were in many cases the centres of worship which had existed from of old, and they had therefore endeared themselves in this way to the inhabitants. Many cities of the modern East, however, are similar to those of ancient Babylonia in that respect.

In addition to Niffer, the Americans have also been excavating at the ruins known as Bismya, the ancient Adab, according to the tablets. It lies in a sand-swept belt of ancient Babylonia, in a region dangerous and deserted because far from water—a disadvantage which probably did not anciently exist. The discovery of the site seems to have been due to the Rev. J. P. Peters, the first really serious explorer of Niffer. The

ruins have but a slight elevation above the surrounding soil, nowhere exceeding 40 feet, and the Head of the expedition to Adab, Dr. Edgar J. Banks, describes them as a series of parallel ridges, about a mile and a half wide, divided into two parts by the bed of an old canal—the source of the city's ancient habitability.

On the summit of the temple-tower being cleared, an inscription of Dungi, 2750 B.C., was found, and this discovery was followed by that of one of the time of Sur-Engur, 2800 B.C. Still lower they came upon a crumpled piece of gold of the time of Naram-Sin, and just below that the large square bricks peculiar to the time of Sargon of Agadé became visible. At a depth of $8\frac{1}{2}$ metres the explorers lighted on two large urns filled with ashes, and two metres lower still a smaller urn. Virgin soil was reached at 14 metres, at which depth the deposits consisted of thrown pottery of graceful design. These Dr. Banks regards as belonging to the most remote period of Babylonian civilization, namely, 10,000 years ago, or earlier.

Other noteworthy antiquities were found on the site, among them being a head with a pointed beard, of a type which the finder regards as distinctly Semitic. The face is long and thin, and eyeballs of ivory had been inserted by means of bitumen in the eye-sockets made to receive them. This type is regarded as being new to the student of Babylonian art, and clearly distinct from the round beardless head of the Sumerian statues. Another object is a vase of blue stone carved with a procession of grotesque long-nosed figures, headed by two musicians playing upon harps. The garments and jewellery, and even the foliage of the background, were originally represented by inlaid work, but with the exception of a piece of ivory which formed the dress of one of the figures, and a few fragments of lapis-lazuli in a branch of a tree, these have all disappeared. Numerous important fragments of vases were also found, and a sea-shell used as a lamp will probably shed light on the origin of the shape of early lamps.

In a trench at the western corner of the temple-tower the explorer practically dug out with his own hands an exceedingly interesting statue bearing the name of Daud, an early Sumerian king. Notwithstanding what may have been said on the subject, this is probably not an early occurrence of the name David, which, in Arabic, has that form. The statue was headless, but the head was found a month later, in company with another head, in the same trench, a hundred feet away. The temple excavated on this site bears the same name as that of

the spouse of Merodach at Babylon, namely, Ê-mah, which, if written in the same way, means "the sublime house." Hammurabi, in the introduction to his code of laws, gives the name of one of the temples of Adab as being Ê-para-galgala, "the house of the great light," or, perhaps better, Ê-ugal-gala, "the great storm-temple." Unfortunately, it is a very imperfect account of the excavations at Bismya that I have had to use, or I should be able to give a much better description of the temples of this primitive site.

Three brick-stamps were found, all of them with the words "Narâm-Sin, builder of the temple of Ištar," testifying to the existence of a fane dedicated to the great goddess of love and war at Adab. Among other still smaller objects may be mentioned cylinder-seals of the usual Babylonian type, one of them showing the so-called Gilgameš and Enki-du—which probably represent entirely different personages—struggling with a lion and a bull respectively. This subject is very common on the engraved cylinders of Babylonia.

An interesting discovery in this site was that of an oval chamber at the south corner of the temple-tower, which, in the opinion of the explorers, had been formerly covered by a dome. At one of its ends was a 6-foot circular platform, with a pit beneath it 4 feet deep. The pit was found to contain ashes mixed with sand which had silted in to the depth of about 2 feet. Smoke marks upon the adjoining wall, and the evidences of great heat to which the brickwork had been subjected, suggested that it was a crematory. Dr. Banks' description of the probable process of burning the bodies is as follows :—

"The body to be cremated was placed upon the platform; flames from a furnace in an adjoining room, passing through a flue, consumed the bodies, and the smoke passed out through a vent above. The ashes, unmixed with the ashes of the furnace, were either gathered for burial in urns, or swept into the pit below. This crematory, which was duplicated in a second chamber near by, explains the absence of Babylonian graves."

Remains of dwelling-houses with ovens and drainage also came to light.

Concerning the excavations at Tel-loh it is not my intention to speak at length, as I described rather fully before this Institute, many years ago, certain of the finds made by the French explorer, M. Ernest de Sarzec, on that site. It lies in a rather inaccessible region fifteen hours north of Mugheir (Ur of the Chaldees) and twelve hours east of Warka (Erech).

The principal building probably had its origin at an exceedingly early date—earlier, in all probability, than the time of the viceroy Gudea, who seems to have rebuilt it. In its area of about 174 feet by 98 feet it contains an extensive series of rooms—reception rooms, sleeping places, kitchens, etc. In later times the entrances to some of the chambers seem to have been regarded as being too public, and they were accordingly partly walled up by a man named Addu-nadin-âhi, who belongs to a period after the date of Alexander.

The discoveries in this little place, strange to say, were much more important than its situation would lead us to expect. It has given us pictures of feats of arms, representations of conquests, and delightful things in the way of architecture, literature, and art. Though its architecture was rather massive for what we should consider to be really good, it is probably owing to this circumstance that the buildings have been preserved to us, and though its art has the same defect in many cases, it has given us the village-chief, and the lady who might well have been his consort and helpmate. There have been preserved to us likewise the god with the fire-stick (as he has been called), inscribed with Gudea's dedicatory inscription to Nin-Girsu, and the remains of the beautiful stele in which Gudea is depicted, led by a priest, into the presence of that same god, who, seated on his throne, waits to receive him. The antiquity of their art is illustrated by those remarkable cylinder-seal impressions bearing the name of En-gal-gala, existing in many forms, all very similar. There will doubtless be much discussion as to what the subject may mean, but the shouting man and the silent women (if we may judge from the mouths of the figures) may have something to tell us as to the manners, customs, and beliefs of the people of that early period—probably 3,500 or 4,000 years before Christ. Of literature of the earliest period we have no real specimens, but if I had time, I would read you something of their national troubles, and also the accounts of the pious works of the kings of the place. The work of M. de Sarzec has been very successfully continued by his successor, Colonel Cros.

Among the most important of the discoveries in Babylonia must be noted those of Mr. Rassam, Sir Henry Layard's old lieutenant, and the discoverer of Aššur-bani-apli's splendid palace at Nineveh, whence the finest of the Assyrian reliefs in the British Museum came. It is needless to say that Assyriologists are greatly indebted to him, for the number of the inscriptions which he sent to this country was enormous—

hardly less than 100,000, if my memory serves me. Among the sites at which he worked were Kouyunjik (Nineveh); Balawat, where the famous bronze gates were found; Babylon; Borsippa, the site of the great temple of Nebo; Tel-Ibrahim, the site of the Babylonian Cutheli; Dailem, the ancient Dilmu, generally called Dilbat; and, last but not least, Abu-Habbah, the ancient Sippar, one of the great centres of the worship of the sun-god. The now venerable explorer describes this site as being an extensive series of mounds surrounded by a high wall of earth. The mound upon which the principal buildings are erected is about 1,300 feet by 400 feet, and contains, in Mr. Rassam's opinion, at least 300 chambers and halls. Of these he excavated about 130, when the work came to an end by the expiration of the firman.

According to the plan drawn up by Father Scheil, who worked there after Rassam for the Turkish Government, the city wall is an oblong rectangle, curving inwards at the north-western end, to follow the course of the canal which formed the boundary of the city at that point. It was near that canal, to all appearance, that the *ziggurat* or temple-tower stood, but very little of that structure now remains. There were tablets everywhere, and notwithstanding the excavations which have been carried on since those of Rassam, the site is probably by no means exhausted. In these ruins were found the celebrated mace-head of Sargon of Agadé, and in all probability also the equally well-known cylinder-seal of Ibni-šarru, that king's secretary. Then we have the beautiful "Sungod-stone," carved for Nabû-abla-iddina—a precious thing which, apparently for safety, they buried under the bitumen pavement. Impressions of the design were made in clay, in case the original should be destroyed, and it was placed in a terracotta box inscribed with the nature of the contents, so that people should know what it was as soon as they came upon it. Among the texts of late date is an ancient map of the then known world; and the oft-quoted cylinder of Nabonidus, which refers to his restoration of the temple of the moon-god at Harran; the date of Narâm-Sin, son of Sargon of Agadé; and other important historical and archaeological facts. Except the stone monument of Nabonidus giving details of the murder of Sennacherib and the downfall of Assyria at the hands of the Babylonians and the Medes, Professor Scheil has found nothing equalling in importance the discoveries of Mr. Rassam. Among Professor Scheil's finds, however, may be mentioned some interesting clay figures of animals—dogs, bears, etc.—the most interesting of them being

one of the former resembling a dachshund, and inscribed with the following words:—

“To the lady Gula (or Bau) I have made and presented a dog of clay.”

To all appearance the dog was sacred to Gula, hence this inscription.

We have already seen, from the excavations at Bismya, that the Babylonians burned their dead in early times, and that, after the cremation, the ashes were collected and placed in urns. Ordinary burial, however, was also practised, but instead of coffins, the custom seems to have been to enclose the body in a large jar before interment. Professor Scheil gives reproductions of some of the gigantic specimens of pottery which he found, in which the body was apparently inserted entire.

We know that, in later days, the influence of Assyria extended as far as the Mediterranean, but we cannot say for certain at what date that influence began to make itself felt. Babylon was the pioneer country in that part of the world, however, and the Assyrians, who spoke the same language, would naturally inherit the influence when the power of Babylonia began to wane. In all probability a certain amount of light is thrown on this point by the tablets found of late years in Cappadocia, and written in cuneiform characters. These documents consist of contracts and letters, and though the script is Babylonian in style, and the envelopes of the contracts, when they have them, are covered with impressions of cylinder-seals similar to those found in Babylonia, they are also, strange to say, dated by means of eponymes—that is, by inserting the name of some official chosen for a year to date by—an exclusively Assyrian custom. These documents cannot be said to be written wholly either in the Babylonian or the Assyrian style, as far as the wording of the contracts is concerned, but with a legal phraseology which seems to antedate them both. The style of the writing is that of about 2000 B.C. or earlier, and notwithstanding possible arguments to the contrary, this may be regarded as their probable date. That Assyria could have had influence as far north-west as Kaisarieh, at that early period, seems to be impossible, but perhaps, notwithstanding its seeming dependence on Babylonia, the northern kingdom may have had more power than is at present generally imagined. The great deity of the place seems to have been Ašur or Ašir, the well-known head of the Assyrian pantheon, so that the influence of Assyria, and not of Babylonia, at that early date, seems to be set

beyond a doubt. The dialect, which is Semitic, is peculiar, and of considerable importance. Such of the letters as I have been able to translate are what we should expect from a community living far from its home. The impressions of a cylinder-seal on the envelope of an ancient Cappadocian letter, showing a four-wheeled chariot, drawn by horses, are of considerable interest.

After this, it is not surprising that Sam'alla, a town at present represented by the ruins of Zenjirli, should have acknowledged, in common with other places in the west, the over-lordship of the great Assyrian king. The inscriptions found at Zenjirli extend from a period preceding the time of the Biblical Tiglath-Pileser (740 B.C.) to the reign of Esarhaddon, and it is probable that the allegiance of the people of Sam'alla only ended with the downfall of Assyrian power in 606 B.C. Sam'alla was apparently the capital of an Aramaic state of some antiquity. The most important object of general interest is the stele sculptured with a representation of Esarhaddon holding, by cords attached to their lips, two prisoners, that nearer to him being Tirhakah, the well-known Ethiopian king of Egypt, whose identity is shown by the uræus ornament on his head. On the side are portraits of Panammû, the king of Zenjirli, Esarhaddon's vassal.

The inscription on the stele bearing the representation of Esarhaddon and his captives is noteworthy, as it shows how far Assyrian power extended. Besides the title of King of Assyria, he calls himself also King of Babylon, King of Šumer and Akkad (practically the same thing), King of Kar-Duniaš (it is uncertain whether there be any distinction in this, but probably the words "all of them," which follow, explain it, and indicate that Kar-Duniaš stands for Babylonia in general), King of the kings of Egypt, Patros, and Cush or Ethiopia. He traces his descent in the usual way, namely, through Sennacherib and Sargon to Bêlibnî, son of Adasi, whom he calls the founder of Assyrian dominion (*mukîn šarrûti mât Aššur*). He then refers to his campaign against Tirhakah (*Tarqû*), King of Egypt and Ethiopia, whom he defeated every day for fifteen days, and fought with personally on five occasions, taking, in the end, the city of Memphis. Among the captives were Tirhakah's women-folk, and his son Usanaḥuru. The usual curses against anyone who should take away or destroy this monument, and appeals to future princes to read the inscription and perform the usual ceremonies of anointing, etc., close the text.

Though the statue of the god Hadad found there is ugly, the

inscription in relief which it bears is exceedingly interesting. It was written for Panammû, king of Sam'alla during the time of Tiglath-Pileser III., who began to reign in 745 B.C. Properly speaking, this statue was not found at Zenjirli, but at Gerchin, about half an hour to the north-east. As Panammû calls himself King of Yaudi, it is clear that that was the name of the district, and we shall have to be careful not to confuse it with the Assyrian *mât Yaudi*, which stands for the kingdom of Judah. The remaining Aramaic inscriptions give the succession of six rulers, who followed in a genealogical line, the later ones at least acknowledging the overlordship of Assyria.

And now we come to the splendid discoveries, likewise made by the Germans (to whose enterprise the world owes also those at Babylon, Aššur, Al Hibba, Zenjirli, and elsewhere) in the ruins near Boghaz Keui, the identity of which site is no longer doubtful, any more than is the nationality of the people whose capital the ancient city was.

Boghaz Keui, upon which all eyes interested in west Asian exploration are now set, lies five days' journey west of Angora, and not far from the sculptured rocks of Yasli-kaya. Two classes of tablets were found there, some of them archaic, and pointing, like those from the neighbourhood of Kaisarieli, already described, to the period of Hammurabi of Babylonia; the others in a much simpler style, sometimes in Babylonian, but often in that unknown language of which the Arzawan tablets from Tel-el-Amarna are examples, and of which provisional renderings have been made by the Scandinavian scholar Knudtzon.

About 2,500 fragments of the kind which had been expected—texts like that in the Museum of the Liverpool Institute of Archaeology and those brought back from that part by M. Ernest Chantre—came to light, many of them being of considerable size. Naturally it was those in the Semitic Babylonian language which occupied the attention of the explorer first, as it is always best to proceed from the known to the unknown. All these inscriptions, which are likely to become the key to the Hittite language, are described as being “Diplomatic documents,” like the Tel-el-Amarna tablets.

With regard to those of the nature of letters, it is stated that most of them are from Wašmuaria, or, in full, *Wašmuaria šatepua Rîa Rîa-mašeša mai Amanu*—that is, as generally read in Egyptian, *User-maat-Ra setep en Ra Ra-messu mery Amen*, i.e., Ramesses II., and Hattušilu, the Chetasar or Hattusir of Egyptologists. It is needless to say, that these new texts

promise to change our ideas concerning the pronunciation of Egyptian entirely, and many familiar forms with which Egyptologists have presented us will have to disappear from our histories.

The first great document found was the text of a contract between Hattušilu and *Ria-mašša mai Amana mār Mimmuaria bin-bin Min-pahritaria*, that is "Ramesses beloved of Ammon, son of Seti I., grandson of Men-pehti-ra" (to adopt the common spelling), or Ramesses I. Both parties call themselves either "great king, king of Mišri (Egypt)" or "king of Hatti," as the case may be, and the whole text of the contract is practically the same as that found in Egyptian at Karnak. In this new version of the celebrated treaty there is also reference to the text of the silver tablet (*ša ina rikilti muḫḫi duppi ša sarpi*). The list of Hittite gods, however, is unfortunately wanting. It is noteworthy that the Hittite kings, like their brothers of Egypt, called themselves "the sun."

In fulness of time we shall probably come to know not only how to translate the so-called Hittite characters, but we shall also learn the names of their deities, of which so many interesting figures exist. We may even find the identity of the so-called pseudo Sesostriis, and that elegant little Hittite king from Bir (Birejik), whose relief has been so many years in the British Museum. There are also numerous Hittite seals, which ought to be of interest when we can read the strange inscriptions with which some of them are engraved.

I have had so much to report upon that I have at present neither time nor space to say anything about the interesting discoveries made at Qal'ah Shergat (Aššur), the old capital of Assyria. All being well, however, this will serve for another occasion, should a communication thereon be desired. It is needless to say that the discoveries on that site, which the all-favoured Germans have likewise excavated, are of considerable importance. But in order to understand thoroughly the explorations made at Aššur, excavations at Nineveh in its larger sense are needed as well—that Nineveh which Jonah is described as having taken three days to traverse. All the points showing traces of ancient towns and cities ought to be explored, and then, perhaps, we should find something which would enable us to understand that statement. In any case, much would probably be added to our knowledge, whether excavations were made there or at any other site or sites in Babylonia and Assyria; and it is to be hoped that this country, which has done so much for Assyriology in the past, may be

allowed to resume her work in that field. There is room enough for all; and we have been so liberal in former years in throwing open our treasures to the world that people cannot call us greedy simply because we wish to continue, in friendly rivalry with them, our researches with regard to the early history of civilization in the Nearer East, in which we have been engaged so long.

493RD ORDINARY GENERAL MEETING.

MONDAY, MARCH 1ST, 1909.

HEYWOOD SMITH, ESQ., M.D., IN THE CHAIR.

The Minutes of the previous Meeting were read and confirmed.

The following paper was then read by the Author :—

MODERNISM: ITS ORIGIN AND TENDENCIES. By
REV. CHANCELLOR LIAS, M.A., Hulsean Lecturer, 1884.

I PROPOSE to state, as plainly as possible, my own personal views on the subject which I have been asked to discuss in this paper. The outspoken utterance of convictions which may be unpalatable to others, has not, I admit, been a principal characteristic of our past discussions, but it must be obvious to all who are acquainted with this Institute, that it is now attempting to meet the changed wants of the time by a certain change in its methods. Years ago, when Christianity was confronted with the somewhat rash dogmatics of a then new school of physical science, great care had to be taken in our papers and debates not to trample on the feelings, or, as may sometimes have been the case, the prejudices, of particular schools of thought among Christians. Our first desire was to unite *all* Christians, as far as possible, in resisting the materialistic teaching which threatened to overthrow, not merely Christianity, but every reasonable form of Theism. It must, however, be evident to us all that the forms under which scepticism and unbelief now lurk are of a different kind. The danger to faith assumes the shape, at present, of random

assertions, of false philosophies and one-sided schools of criticism. The only way, as it seems to me, to combat these new difficulties is to lay down the true principles of Christian philosophy, and to ascertain the true limits of criticism. This, however, can only be done by the fullest and freest interchange of opinion. The time has, I believe, come when Christians can meet together and discuss their differences reasonably and temperately, without unnecessarily offending prejudices, or evoking violent antagonisms, and without the endeavours, far too common, I am afraid, in the past, on both sides, to muzzle the free expression of opinion by calling names and imputing motives. If the Victoria Institute will boldly embark on this new departure, that of giving a fair hearing to all who "profess and call themselves Christians," on the weighty questions now debated, and of encouraging everyone to speak his mind plainly, so long as he shows proper respect for the opinions of others, it may do even a greater work in the future than it has done in the past. To the policy of repression must chiefly be attributed the intellectual and political convulsions which have alarmed the world. The permission of free speech to every man is the safety valve which prevents dangerous explosions.

Modernism, I take it, is the demand for free speech in the body which, for centuries, has been the greatest and most consistent enemy to all freedom of thought whatsoever. The barriers to that freedom of speech have of late been breaking down on all sides in the Roman communion. In the last paper I read before the Institute I gave the history of the first successful attempt since the Reformation to shake off the fetters of the Roman Curia. It is now my task to indicate, as far as I can, the character of a second great revolt, which is spreading rapidly in France and Italy, and which has its adherents even in England. It is an attempt which differs from that made by the Old Catholics both intellectually and practically. It not only deals far more freely with first principles than the older movement, but strangely enough, it demands the right to express far more advanced opinions than any Old Catholic has avowed, without separating from the communion of the Church whose most authoritative utterances it rejects. Such a movement in a church whose policy for ages has been the most rigid repression of independence, is absolutely certain to run into dangerous extremes in the opposite direction. Consequently, earnest religious men among ourselves have—again, naturally enough—treated it with scant sympathy. I venture to think this is a mistake. Before we withdraw our sympathy

from the Modernists, we are bound to remember the circumstances of their case. The iron repression to which they have so long been subject must of necessity lead to the strong recoil in the other direction which is displayed in their writings, and if we find reason to deplore some of their utterances, we ought not to excommunicate them altogether, but endeavour in a spirit of brotherhood and loving-kindness to bring them to view things from a wiser and more truly liberal standpoint.

Most of us are fully acquainted with the position of Dr. Tyrrell, once a member of the "Society of Jesus," but now expelled from the Order, and disavowed by the Church to which he belongs. He has told us that Modernism is not a sect, but a school. That is to say, it lays down no principles and imposes no dogmas. It simply claims a right to express opinion freely while still belonging to a body which for a thousand years and more has not only systematically denied that right, but has been accustomed to put down those who claimed it with not a little ferocity. I am sorry to say that Dr. Tyrrell's description of Modernism is, I am afraid, not altogether correct. In Italy, at least, the Modernists have laid down dogmas of their own in the place of those against which they contend. In an article in the last number of the *International Theological Review*, an Old Catholic organ of independent Catholic thought, published at Berne, Dr. Herzog, Old Catholic Bishop for Switzerland, quotes the organ of the *Società Internazionale Scientifico-Religiosa* at Rome as laying down as a *commune terreno d'intesa* in the *Programma dei Modernisti* which it has issued, such propositions as the following, in regard to the gospels: "Mark is the oldest of the Synoptic gospels"; it was used by Matthew and Luke; "Matthew and Luke are independent of each other": these last "have both used a writing called 'Logia'": while "of the compiler of the fourth Gospel we are not able to catch a passing indication, but he is probably not identical with John." Then "the Pastoral Epistles of St. Paul and the Epistle to the Hebrews are clearly not authentic, and the Catholic Epistles are pseudepigraphic."* Now, let it be understood that I have no objection to the freest possible investigation of the critical problem, unless in the case of persons who have undertaken obligations to some particular religious body, and to the public at large not to carry such investigations so far as to

* It is only fair to say that in a paper by the Abbé Minoechi which has reached me from Italy I find no tendency to dogmatism of this kind but only a plea for free inquiry.

conflict with the principles that religious body was formed to maintain. But for my own part I believe the establishment of positions by critical analysis to be a task of extreme difficulty, and also that it would be well for critics to be a little more modest in representing their conclusions as irrefragable and final. I would further observe that the modern critic is wont to establish his case by ignoring all methods of investigation save his own, and all considerations outside his particular methods which have led, or may lead, to a contrary conclusion.

Such a method seems to me as unscientific as it would have been for astronomers to have ignored the calculations of my dear and honoured friend the late Professor Adams on the perturbations of Uranus, and to have declared that there was not, and could not be, any cause but the idiosyncrasy of Uranus himself, for the eccentricities in his orbit. I shall return to this question later on. But I may mention here that in the article to which I have alluded, Bishop Herzog—he was for years Professor of N.T. Exegesis, I may say, in the University of Bern—has once more re-stated the arguments *against* the theory that St. Mark is the oldest gospel, and has at least shown that there is a good deal to be said on both sides of a question which, as far as my experience goes—and I have been reading both sides of it for more than half a century—is as insoluble by purely critical methods as is the problem of squaring the circle.

The principles of modernism, I think, find their most adequate expression in Dr. Tyrrell's now famous "Letter." I shall take this as my text-book, illustrating it, when necessary, from one or two of his subsequent productions. That it is a formidable attack on Romanism considered as a practical system, and that it deserves the closest attention of those among us who have been led to regard that system with deep admiration, few will be found hardy enough to deny. Its admissions are remarkable indeed. He acknowledges (pp. 48, 49) that "the conservative positions" in that Church "are maintained by ignorance, systematic or involuntary"; that "the close historical study of origins and developments must undermine many of our (*i.e.*, the Ultramontane) most fundamental assumptions in regard to dogmas and institutions"; that "the sphere of the miraculous is daily limited by the growing difficulty in verifying such facts, and the growing facility in reducing either them or the belief in them to natural and recognized causes." He further grants (p. 49) that "in the approved writings of her ascetical teachers (*i.e.*, those of the Church of Rome) and her moralists, in the

prevailing practices of her confessors and directors, in the liturgical biographies of her canonized saints, in the principles of her government and in her methods of education ; much that revolts the very same moral and religious sense to which in the first instance her claims to our submission must appeal.”* This passage demands the very closest attention. Every portion of it is as formidable an indictment of the working of the Roman system as the most uncompromising of its opponents could have framed ; and the most formidable of its features is that it comes not from those ignorant Protestants who, as the Roman controversialists are so fond of telling us, never did and never will understand the system of the infallible Church, because they have never viewed it from the inside, but from a man than whom no one better understands the Roman system and its working, having viewed it from the standpoint of the Order which above all others has proved itself indispensable to the Papacy, and is understood to hold the Infallible Pope himself in the hollow of its hand. Nor does Dr. Tyrrell flinch when confronted with expulsion from the Jesuit Order and from the Roman Church. He returns to the charge in his *Through Scylla and Charybdis*, and boldly arraigns Mediævalism in a subsequent work with that title. He does not scruple to speak of “the long and sordid record of clerical scandal that we find in Church history” (of course he confines this phrase to the history of the Church to which he belongs), “the persistent recrudescences of avarice, ambition and licentiousness in the ministers of the sanctuary” (p. 49). And though he tries to shelter himself under the plea that this admission “can prove no more against Catholicism” (by which he means Romanism) “than the like phenomena in the ministers of law and religion can prove against law and government,” he forgets that human societies do not claim to be under

* The apologists of Rome will also do well to notice the admissions of Cardinal Mercier in regard to Belgium, the country in which the Roman Church has perhaps a firmer hold on the people than in any other country in the world. He says (see Tyrrell, *Mediævalism*, p. 16) that while every young man “as he grows up takes a pride in developing his bodily strength, in adding to the amount of his knowledge, in forming his judgment, in deepening his experience, in improving his speech, in refining his style, in mastering the ways of the world, in keeping in touch with the course of events . . . many a Catholic of twenty, thirty, or forty years of age would, if asked, be forced to confess that since his first communion he had learned nothing, and perhaps forgotten a good deal of his religion.” Extremes, it seems to me, meet on this matter. Our habit of allowing everything to be questioned is becoming as fatal to religious research or reflection among our laity as is that of the Roman Church in forbidding all inquiry.

infallible rule, and to possess infallible Divine guidance. Once more, in his "Letter," he allows that "the Roman communion may be no more than the charred stump of a tree torn to pieces by gales and rent by thunderbolts"; that "she may be and *probably is** more responsible for all the schisms than the schismatics themselves"; though he admits that this is "too elliptical an expression" (note 8). When he explains that by the Church he means "Churchmen," he makes confusion worse confounded. For in the first place what he said was not "the Church," but "the Roman communion." And next, does he mean by "Churchmen," the members of the Church, or is he using the word in the loose and inaccurate fashion which is so common even among those who should know better, as indicating the clergy or the hierarchy?

However, he goes on to say that all this will not prevent the Roman communion from standing for the "principle of Catholicity, the ideal of a spiritually united humanity centred round Christ in one divine society." It is here that those who are not members of the Roman Church will be inclined to join issue with him. If the Roman Church has adulterated the true faith to such an extent as to be largely, at least, responsible for the schisms which have taken place, how does this "ideal" fit in with her treatment of persons, validly baptized into the Catholic Church according to the formula ordained by Christ Himself, and thrust out by ecclesiastical intolerance, pride, or arrogance, sometimes to die excommunicate and accursed, and perhaps after being "handed over to the secular arm." Or if the rulers of a church, presumed as an organization, remember, to be infallible, have presented the spectacle of the gravest scandals, frequently unpunished and screened by their brethren, if they have been so frequently stained with the crimes of "avarice, ambition, and licentiousness" (p. 49); what becomes of the unfortunate lay folk who have been encouraged to sin by the example of their teachers, whose voice, *ex hypothesi*, should be to them as the voice of God Himself?

Dr. Tyrrell's attitude to his Church in the face of such damning facts as he has himself admitted certainly needs some explanation. If the Church of Rome, while professing supreme authority and even infallibility *as* a Church, has so grievously and persistently misled those who have looked up to her for guidance, how, we who are outside her may fairly ask, can an honest man remain any longer within her pale? "Come out

* The italics are mine.

from her, and be ye separate" would be, one would think, the natural verdict of conscience in such a case. What is the use of telling us that Christianity is a Life, when that Life is not lived by those who alone can, by precept and example, transmit it to us? "How, then," as St. Paul would say, "shall God judge the world?" Has not Dr. Tyrrell told us (p. 93) that the most difficult "note" of the true Church with which to "deal" is that of "sanctity," and that no intelligent member of the Roman Church can be "unfamiliar with the shock experienced by the cultivated lay mind at first encounter with certain pages in ascetic and moral theology"?* Dr. Tyrrell goes on to say that he "need not specify" these "pages." Had he done so, he would have given certain apologists of Rome among us a "shock" which would be of considerable use to them. Unfortunately in this age we are so "tolerant" that we often shut our eyes to facts, if this indeed be tolerance. Had Dr. Tyrrell been able to "specify" and quote these pages, they would have been a surprise to most of us. Many of them would be found such as, to use Gibbon's expression, were best "veiled in the decent obscurity of a learned language." I have not, however, space to enter into Dr. Tyrrell's ingenious defence of his present position in the Roman Church. His refinements of logic, I must confess, appear to me to savour too much of the methods of the Society to which he has ceased to belong.

It is impossible to touch on all the interesting points raised in the "Letter," and in the volumes which have succeeded it. I can but pick out one or two more and then pass on to modernism of another type. I have no space to discuss the attempt to minimize the errors and dangers of the Roman system by which remaining in her is defended. I can only say that I prefer the attitude of Döllinger when he said of the Vatican dogmas that neither "as a Christian, a theologian, an historian, or a citizen" could he subscribe them, and the honest determination with which he remained till death outside the pale of the Roman Church. Nor can I stop to point out the singular identification of Romanism with Catholicism in Mr. Tyrrell's pages.† But what, I confess, surprises me not a little, is the way in which he seems to ignore the facts of history when he consistently endeavours to represent "Catholicism," by which he means Romanism, to be a *free* development of Christian

* See *Novellen*, by Marie Murland.

† M. Loisy adopts the same assumption in his *Gospel and the Church*, p. 175.

opinion.* If there is any one fact more indelibly stamped than another on the pages of Church History, it is that the Papal claims, from their first appearance to the days of the Vatican Council, have been based on a succession of the most daring outrages on individual freedom, on consistent and continuous appeals to force instead of logic. It is true that little stress is laid in our days on such facts as those of the statute *De Heretico Comburendo* in this land and the Inquisition on the Continent. Most of us who are not Roman Catholics feel bound to hope—some of us rather “against hope,” I am afraid—that those methods of producing and securing faith are disapproved now by our brethren of the Roman Church, and so we have ceased to press them. But when we hear of the “historical development of the Catholic Church,” we must surely admit that the claims of the Papacy were enforced by fire and faggot, by plots and assassinations, by “wars and rumours of wars,” that the Papacy has never disavowed the use of such means, and that its authority has been founded rather on them than on the free verdict of the Christian Church. I do not deny that Christianity may and will develop. But such a development must proceed by fair and reasonable processes. I must hold that the methods of the Papacy have to the last been neither fair nor reasonable, and that the full and healthy development of religious belief has been, and will be impossible as long as those claims continue to be recognized. “He that letteth will let, until he be taken out of the way.” Nor can I understand how any development can possibly be a satisfactory one unless the Orthodox Churches of the East, and those at least of the Protestants who accept the ancient faith of Christendom, and who are, therefore, as good Catholics, if not better, than the members of the Church to which Dr. Tyrrell still belongs, are allowed to contribute their quota to it. Even from those who reject the Catholic Faith altogether we may learn a good deal as to the most convincing way of stating it.

Cardinal Newman, it is true, based his secession to Rome on a theory of development. But that development was neither logical nor natural. That is to say, it was neither the result of the application of the reason to the words of Christ and His first Apostles and ministers, as handed down to subsequent ages in the Christian Society, nor the result of natural forces, such as develop the plant from the seed, the child into the man, or the growth of the Universal Church of Christ as she exists to-day,

* See “Letter,” p. 62.

with her Archbishops and Bishops, her Presbyteries and General Assemblies, her Synods and Conferences, her canons, rules and regulations, from a simple brotherhood in a single city, into a complex organization extending throughout the world. Cardinal Newman describes his "development" as consisting in a "contemplation of the object of its adoration" which from "an impression on the Imagination" becomes "a system or creed in the Reason." Accurate thinkers will be more inclined with Bishop Butler, to attribute to imagination all the errors with which the world has been afflicted since man entered it.* The Cardinal speaks of a development according to ideas of congruity, desirability and decorum, formed by the action of "patient reflection and moral sensibility." But of *whose* "patient reflection and moral sensibility"? Not of Catholics at large, but of an "infallible developing authority"—the wire-pullers of the Vatican, to wit. Dr. Tyrrell again speaks of what he calls "Catholicism" as an "explicitation" of the "thought of the greater prophets, of Christ, of St. Paul, of Tertullian, of Origen, of Clement of Alexandria." So far as Tertullian is concerned, we may agree to make him a present of that more or less heretical writer. But when we read Roman theology, we cannot help seeing how intensely Latin it invariably is. Christ and St. Paul may be "developed" in it. But it is an altogether unnatural development, out of all "proportion" to the "faith." Clement and Origen—why Dr. Tyrrell inverts this order I cannot say,—when read, appear to transport us into a fresher and healthier intellectual atmosphere altogether, and one far more in harmony with modern thought than anything Latin theology has ever given us. And Origen soon became a heretic in the eyes of the hide-bound theologians of a later age. Those who read him in Roman Catholic editions will often find his pages punctuated with "*Cave*," in order to warn the reader how sadly his free and breezy utterances conflict with the cut and dried "developments" of subsequent ages. "Development" there undoubtedly is in Roman theology, but it is out of shape. The iron of authority has entered into the thinker's soul. And the stamp of Latin thought, with its narrow and delusive axioms and postulates, and its clear and vigorous though rigid method of deduction from them, is upon it all through. And that it is why it is losing its hold, and *must* eventually lose its hold, on the mind of man yet more completely, as race after race is brought into the Christian fold.

* *Analogy*, Part I, chapter i.

I must add a word or two on another form of modernism, which reveals the attitude of the school on the criticism of the Bible. There is not much to detain us in the Abbé Loisy's *The Gospel and the Church*. It chiefly takes the forms of criticism of Professor Harnack's *Wesendes Christentum*. I, at least, have no controversy with him here. Alike in his orthodoxy and his heterodoxy I am disposed on the whole to agree with him. But he adopts in his criticism methods of a particular school which appear to me, as to many others, open to serious objection. Thus he remarks (pp. 31, 32) that "it seems inconceivable that Jesus should have preached at Jerusalem, declaring Himself to be the Messiah, on several occasions, during several (*three?*) years, without being arrested. He can but have done so once, and paid the forfeit with His life." This seems to me the *πρῶτον ψεῦδος* of the method of the modern school of criticism. You say that this or that statement is "inconceivable," and you fancy yourself thereby to have exposed the inaccuracy of contemporary, or all but contemporary, and, moreover, extremely well informed historians.* Then St. John's Gospel is rejected, not because it conflicts hopelessly with the contents of the others, but because it gives the esoteric, as the other three Gospels give the exoteric, teaching of Christ: and this, in spite of the overwhelming evidence which has been adduced in favour of the Gospel having been a genuine production of a disciple of Christ. Modern criticism carries on its own isolated research mainly on lines altogether subjective, and establishes its

* M. Loisy, it is true, soon goes a good deal farther than he does in his *Gospel and the Church*. In *Quelques Lettres*, pp. 93, 94, he tells us that "on the evening of the Passion the Body of Jesus was taken down from the Cross by the soldiers and thrown into some common grave, where nobody could have had the idea of going to look for, and recognizing it after the lapse of a certain time." Note here, as an illustration of modern so-called "scientific" methods, that we (1) have a definite historical statement made eighteen centuries and a half after the event, without the slightest historical evidence on which to rest it; (2) that Mr. Loisy flatly contradicts the statements purporting to be made by eye-witnesses, although handed down as contemporary documents for nearly eighteen hundred years in a society definitely organized for that purpose; and (3) that such a masterly statement of the evidence as that, for instance, in Godet's *Études Bibliques* is absolutely and contemptuously ignored. And that just because the writer personally imagines the event of which such strong evidence can be produced to be incredible! I shall believe this sort of criticism to be "scientific" when I find secular historians resorting to such canons of criticism, and not before.

conclusions by altogether refusing to discuss any conflicting results which may seem to have been established on lines other than its own. I may myself claim to have established the facts (1) that the doctrinal matter declared in the fourth Gospel to have been taught by Christ is the foundation of the doctrinal system proclaimed in *everyone* of the Epistles; and that (2) the language in which Christ's teaching is reported in that Gospel is invariably more elementary in form than the language in which that teaching is presented in the Epistles. Now the conclusion I have drawn from these facts, namely, the genuineness of the fourth Gospel, may be sound, or it may not. But it cannot be said that the opposite conclusion is established until this theory has been examined and proved to be false.

M. Loisy, it is true, does not, at least in his *Gospel and the Church*, accept the dogmas about the priority of St. Mark's Gospel laid down by the Italian modernists. But he appears to be working on their lines, which appear to me, I confess, to be altogether unscientific. Therefore, it may be well to bear in mind the language of Bishop Herzog in the article I have mentioned above, echoed as it has been by Professor Flint, by Professor James Robertson, by Professor Orr, and other competent authorities. "The programme of the modernists is an expression of opinion which compels respect. But we shall do well to examine it critically before we accept it." A great question such as this should surely be regarded from every possible point of view, and every argument in relation to it carefully examined before the matter is assumed to be settled. Otherwise our methods, by whatever epithets we may be pleased to describe them, differ in no way from those of the Vatican, and must ultimately, however long they may hold the field, share the fate of all unproved sayings, from whatsoever quarter they may come.

Dr. Tyrrell, like M. Loisy, does not remain altogether stationary. With what I cannot help thinking to be the somewhat hazy metaphysics of a good deal of his *Scylla and Charybdis* I have, I must confess, little sympathy. But with his bold indictment of modern Roman methods, and his vigorous protests against the Cardinal's characteristic phrase, "the apostate Dollinger," I am thoroughly in accord. I have not, I must admit, made an exhaustive study of Dr. Tyrrell's works. But what I *have* been able to read, I have read with attention: and I have not found a word which need prevent him from becoming an Anglican, an Old Catholic, or even what is called an "orthodox Nonconformist." I admire heartily his concluding

appeal to Cardinal Mercier in his *Mediævalism*. I cannot blame him for his honourable sentiment of loyalty to the great communion to which he still belongs. But I would ask him, in all seriousness and in all sympathy, if he himself would have been a possibility but for the solvents applied to Roman theology by a Catholicity broader and worthier than that to which he still continues to cling.

I have now expressed what I feel on this subject with plainness, but I trust in no dogmatic spirit. If I have used the personal pronoun pretty largely, it is not because I regard myself as the ideal man, with whose conclusions every rational person must agree, but, on the contrary, because I can only speak for myself, and therefore refuse to dogmatize. I am quite willing to be converted, if I am shown to be mistaken. But I believe we shall never have a true development of Christianity until it is founded on sound reason, until it takes account of other bodies and other theologies beside that of Rome, and is established by the fullest, the freest, and the friendliest discussion. Finally I must say that it seems utterly impossible that the Church of Rome can tolerate such utterances as those of the modernists, and that for a very simple reason. On the day she does so, she ceases to exist.

DISCUSSION.

The paper being concluded—

The CHAIRMAN (Dr. HEYWOOD SMITH) expressed the thanks of the meeting to Chancellor Lias for his paper, and said that all were indebted to him for his frankness and boldness in holding such language. The great difficulty to his mind was to define Modernism : did it imply development, had it this as its object ? If so they must bear in mind the possibilities of this development and consider whither it might lead them. Then it might be that they would have to ponder whether simplicity was not more valuable than any development to further complication of structure. There was also the question to consider as to whether Modernism attacks one sect and one creed only for its abuses, or whether it is not merely increasing criticism to hypercriticism of all established religion.

The Rev. R. V. FATHFULL DAVIES (Secretary of the Christian Evidence Society) said that Modernism was a wide subject with a

vast range, from a position tenable to the Roman Church to one that could not be recognized as Christian; the term Modernist was used to denote men who differed very extremely from one another on points of the greatest importance. It was, then, very difficult to gain a general idea of the movement. Modernism must be defined as a tendency even more than a school. Those Modernists who remained in the Roman Church traced their opinions to the doctrine of development of Newman, and it is considered possible that Newman's letter may be condemned as a source of Modernist principles. It was very difficult to gain a general idea of the movement. Loisy's book, *Autour d'un petit livre*, gave a very interesting view of his position; while Tyrrell's *Through Scylla and Charybdis* was also very interesting. Perhaps a good general idea could be obtained from a little book called *What we Want*, being a translation by Mr. Lilley of a protest by thirteen Italian priests. A translation of the encyclical *Pascendi* is appended to M. Paul Sabatier's interesting lectures on Modernism. In the Encyclical the Modernists are denounced up hill and down dale, and the opinions ascribed to them severely condemned, but it is a question whether they really hold these opinions, or whether the Vatican thinks that this is what Modernists believe, or ought logically to believe. The representation is, however, of the nature of a caricature. In Sabatier's volume there is not a great deal of information, but the position of the extremists will be found to be stated by Loisy.

Professor ORCHARD said that Modernism appeared to be the revolt of the slave against his fetters. It was produced by the reaction against the Roman system and its intellectual and moral slavery. In the movement itself the love of liberty could be recognized as its inspiration to a greater extent than the love of Truth. Its followers were affected not a little by the dominant passion of the present day. They had not been able to keep clear of the methods of the higher criticism.

There were two points in the paper on which he would like to make separate comment. First on p. 129 where reference was made by the writer to Newman's system. It was interesting to know that Newman tried this on his brother, Professor Frank Newman, surrounding him with objects of contemplation which were to lead to the desired result, but without effect.

Again, on p. 130, where the Cardinal was quoted as writing of an

"infallible developing authority," in the speaker's judgment if the Roman hierarchy laid claim to "development" it could not at the same time claim to be "*semper eadem*."

The Rev. J. TUCKWELL concurred with Mr. Faithfull Davies in what he had said as to the wideness of the subject and its want of definition. There were, however, some threads of a scientific character to be found, and a Modernist Philosophy was developing which was becoming very attractive to some. There was, however, a desire to prove a Unity in all natural things which could only lead to Pantheism, and too great a leaning on modern methods of criticism which were too often subjective and too apt to ignore external evidence and fact. He was amazed at the frequent ignoring of archæological evidence to the falseness of theories accepted by the Modernists. The position adopted by the Modernist critic of to-day, *e.g.*, Loisy, could be traced to French Deism which was transferred to Germany after the Napoleonic era. They should rejoice in the revolt if it led back to truth and simplicity and not to rationalism and an anti-christian pseudo-philosophy. The rejection of all Christian doctrine and all supernatural religion in France, seemed to be a great danger to Modernism, with which it was brought so much into contact.

The Rev. S. PIKE was glad to have heard Chancellor Lias' sentence (p. 124) on the higher critics. It had often happened that theories had been developed which were later on overthrown by the spade of the investigator; the critics pass from their theories but still forget why. It would be a pity if the Modernists should forget that true advance was generally founded on historical fact and not on theory alone. Owing to the system of the Roman Church Modernism was in a manner stultified. Its followers were trained in blind faith, and seeing a revolt they were too anxious to adapt the system to those who were drifting away.

Colonel ALVES asked those present to consider how many so-called reformers had practically thrown the Old Testament overboard. Christian people were too apt to give a flat denial to statements in the Old Testament which have not as yet been fulfilled, as for example the statement often made that the Jews shall not go back to their own land, denials that the Temple shall be rebuilt, or that the recurrence of the animal sacrifice is once again to be witnessed.

The Rev. CHANCELLOR LIAS, in replying, said that he had really

little to say, for all those who had spoken were, like the game cocks in the story, all on one side. Something had been said of the danger of development, which applied not only to the movement now being discussed, but also to such societies as the Victoria Institute. It was impossible that they should all be able to accept one another's theories as they stand, and agreement could only be arrived at through free discussion. Agreement so arrived at would be development, and this development was that which was needed on all sides. The development against which all should be on their guard was that of "Reason led by imagination." Imagination was too apt to run riot.

As regarded the definition of Modernism, he agreed with the Rev. Faithfull Davies that the subject was too wide for exact definition. But in their criticism it would be well to bear in mind that Modernism was in great measure a revolt. They must bear in mind the case of the ex-priests, and remember how helpless these people were when they first escaped. So it must be with the Modernists, they must be treated patiently. For with them too the revulsion must at first be extreme.

COMMUNICATION FROM REV. A. IRVING, D.SC., B.A.

Being prevented from attending the meeting on March 1st, I beg to offer a few remarks upon Mr. Chancellor Lias's paper on "Modernism." The term seems to me to carry a wider connotation than the author of the paper has given to it. Modernism, it is conceived, has two phases—(i) the scientific, (ii) the pseudo-scientific; and it is with the latter phase that the learned Chancellor mainly deals, in such a way, however, as to have my full sympathy. I am glad to find that (pp. 124-5) he substantially endorses the criticisms which I ventured to make on the position of the "Higher Critics" in the discussion of Professor Sir Wm. Ramsay's paper two years ago (see also my letters to the *Guardian* of last year (November and December) in reply to the Norrisian Professor of Divinity, and to Dr. Dukinfield Astley). I entirely agree with the author's rather severe remarks upon the position of M. Loisy on pp. 130-1, and with the stricture of Bishop Herzog (p. 132). The spirit of that *πρωτον ψευδους* (p. 131) taints the whole method of that school, and I am bold, therefore to maintain that it is "pseudo-scientific."

A short time ago I was driven in private controversy to adjure a champion of that school, in the name of intellectual veracity, not to juggle with the word "science," under which all sorts of fallacies may lurk. I hold that, unless a man has done enough work in the region of those sciences which come under the purview of the Royal Society, to know the difference between what he *knows* and what he has only a reading or talking acquaintance with, he needs to beware of getting on very slippery ground, and of advancing some other cause than the cause of truth. (See the correspondence in the *Guardian* of 1905 between myself and the late Canon MacColl.)

Then, as regards the scientific aspect of "Modernism," I need not tell the members of the Victoria Institute that I have no sympathy with what Chancellor Lias (p. 122) describes as the "rash dogmatics of the* school of physical science"; indeed for the last two decades I have been engaged in my small way in combating them. Even Pope Leo XIII. attempted something of the sort, but found himself out of his depth, and had to fall back upon St. Thomas Aquinas (if I remember rightly) as entitled to have the final say upon the highest questions of philosophy, to which the discoveries of science may lead up in this twentieth century! I should rather say that there is more true philosophy in the dictum of the poet Wordsworth—

"To the solid ground

Of Nature to trust the mind that builds for aye."

So when a champion of the "higher criticism" tells me that the real difference between us is in "the presuppositions with which we start," my reply is the simple one, that *inductive science* knows no presuppositions; it finds its data in observed facts, and checks its inferences by further observation of facts. I will ask permission to add two short quotations:—

"Liberty to seek—liberty to formulate the found. Devoutly we claim it beside the graves, at which the whole world creeps up to mourn with us; the shrine of our aged master (Darwin), the snow-drift of our young master (young Balfour of Trinity). Far-withdrawn teachings out of the perfect *Work* they opened for themselves and for us. What deeper and yet more universal teachings became theirs out of the all-wise *Word* we perhaps may not know. And they will help us to read the Word itself more truly. Well has it

* I said "a," not "the."—J. J. L. See p. 122.

been said by a believing man of science (Lionel Beale)—‘Science can no more submit to be controlled than theology can allow herself to be fretted at every little alteration in scientific opinion. Intellectual work of every kind must be free.’ And the New Testament is still the one volume of religious books, which accepts the whole statement”—(see *The Spirit of Enquiry*, a sermon preached before the British Association in 1882, by the Bishop of Truro, Dr. Benson, afterwards Primate).

To this I will venture to add some remarks introductory to a sermon by myself on the Papal Encyclical, *De Unitate*, of 1896, published in the *Clergyman's Magazine*:—

“When the Papacy gathered the ‘catholic’ world around it in the sixteenth century at the Council of Trent, and added twelve new doctrines to the Creed of Christendom (as the great Christopher of Lincoln used to say) it virtually made itself ‘a new church,’ and took up a position antagonistic to that ‘forward movement of the human mind,’ which, beginning with the *Renaissance*, has been going on ever since. Whatever chance was left to it of retreating from that position would seem to have taken away by the decrees of the Vatican Council of 1870. So it has come to pass that there is a fixity, we might almost say, a petrification of thought, which characterizes the teaching of the Roman Church, and has tended to place her more and more outside of human progress and of sympathy with the march of the human intellect, which has marked the nineteenth century. With ideas and modes of thought still cast in an Italian mould she bids fair to be left ‘high and dry’ by the great Teutonic races, who have become readers of their Bibles, and investigators of Nature, and to whom the future of the world seems to belong.”

Even the late Lord Acton saw this; and I remark (*loc. cit.*) that “it is a pity the leaders of thought in his Church cannot share his enlightenment.”

494TH ORDINARY GENERAL MEETING.

MONDAY, MARCH 15TH, 1909.

FREDERIC S. BISHOP, ESQ., M.A., J.P., IN THE CHAIR.

The Minutes of the previous Meeting were read and confirmed.

The following candidates were then elected to the Victoria Institute :—

MEMBER.^o—Miss M. D. McEwan.

ASSOCIATES.—H. H. L. Chichester, Esq. ; George Evans, Esq.

The following paper was then read by the Author :—

THE LEGISLATIONS OF ISRAEL AND BABYLONIA.

By HAROLD M. WIENER, M.A., LL.B.

IN the year 1902, M. de Morgan discovered a black diorite stele on which were inscribed "the judgments of righteousness which Hammurabi the mighty king confirmed." Some 35 sections had been erased, apparently with a view to engraving a fresh inscription on the portion of the monument they occupied, but the rest of the code was practically intact. While there are many points in the translation, history and interpretation on which uncertainty must long prevail, we have sufficient materials to form some general conceptions of the legal civilisation of the subjects of "the mighty king."

The subject matter of jural laws is human life in its social aspect. It deals with the acts and omissions of human beings in their relations to one another, and as a necessary result the influences that mould any given legislation are both manifold and diverse. Nowhere does the student realise more vividly that the roots of the present lie deep in the past, and accordingly the first task in taking a general view of the Babylonian code must be to distinguish the primitive ideas that Hammurabi and his contemporaries brought from a remote past. We must next consider the geographical and other conditions of their task, the means of which they could dispose,

the nature of the problem with which they were faced, the state of mental development to which they had attained, and we shall then be in a position to form some conception of their views and policy. In other words we must glance successively at the Ideas the nation had inherited from its Infancy, at its Geographical Environment and Historical Circumstances, at the Conditions and Tasks of its Daily Life, and at the Quality and Development of its Intellect; only when that is done can we hope to see something of its Soul. In the case of the Babylonian code the occupations of the people and its history were almost entirely determined by the geography and can for the most part be dealt with under that head.

In dealing with the historical portion of our subject nothing is possible in the present condition of our knowledge beyond a few generalities. The legal antecedents of the code are too largely unknown, and it would be quite impossible to attempt to separate the elements that are due to the Sumerians from those contributed by the Babylonians. But we have seven sections belonging to some Sumerian legislation, and these are sufficient to show that the code of Hammurabi merely represents a particular stage in an orderly historical evolution. Thus we read in the Sumerian laws, "If a wife hates her husband and has said, 'You are not my husband,' one shall throw her into the river."* This penalty of throwing into the river remains in the case of the undutiful wife of Hammurabi's code†, though there the law is somewhat more elaborate and testifies to more advanced legal reflection. Evidently the two enactments rest on the same theory of punishment. Again the Sumerian laws provide that "If a husband has said to his wife, 'You are not my wife,' he shall pay half a mina of silver."‡ Precisely the same idea of compensating the wife for a divorce reappears in the code, but there the amount is either a sum equal to the bride-price, or if there was no bride-price, one mina in the case of well-to-do persons, one-third of a mina in the case of a plebeian§. The fundamental principle is identical, but social inequalities have led to some differentiation in detail.

But if our present knowledge of Babylonian history enables us to do little to trace the antecedents of the code the same

* Johns' *Babylonian and Assyrian Laws*, p. 42.

† § 143. If she has not been economical but a goer about, has wasted her house, has belittled her husband, one shall throw that woman into the waters.

‡ *Op. cit.*, p. 42.

§ §§ 138-140.

cannot be said of the comparative method. A few examples will show how this elucidates the provisions of the legislation and illuminates their *Vorgeschichte*.

"There is no system of recorded law," wrote Sir Henry Maine, "literally from China to Peru, which, when it first emerges into notice, is not seen to be entangled with religious ritual and observance."* The code of Hammurabi to a very great extent belongs to a later stage of development than that contemplated in this dictum; and this by itself is sufficient to mark it as a fairly mature system, yet slight remains of the earlier state of affairs may be traced in provisions for ordeals (§§ 2, 132), and oaths as methods of proof (§§ 20, 23, 103, 120, 206, etc.). In such cases this survival from ancient ideas has, however, been worked into the system to fulfil a definite purpose. There are parallels all the world over, but perhaps the best short explanation that can be quoted is to be found in a few paragraphs of the late Indian law-book known as *Nārada*. Here the principle underlying the supernatural methods of trial and the object of their retention in relatively late times are very clearly brought out:—

"28. Proof is said to be of two kinds, human and divine. Human proof consists of documentary and oral evidence. By divine proof is meant the ordeal by balance and the other (modes of divine test). 29. Where a transaction has taken place by day, in a village or town, or in the presence of witnesses, divine test is not applicable. 30. Divine test is applicable (where the transaction has taken place) in a solitary forest, at night, or in the interior of a house, and in cases of violence, or of denial of a deposit."† On paragraph 29 Asahâya, a standard Indian commentator, remarks, "In the case of all those transactions which take place during daytime, eye and ear-witnesses are present. Documentary evidence, likewise, is generally available in such cases. Therefore, divine proof should not be resorted to. Where a transaction is known to have taken place in the presence of witnesses, divine proof is also not applicable." Similarly on paragraph 30 he writes, "In all the places and occasions mentioned in this paragraph human proof is not applicable, wherefore divine test has to be resorted to."

The sections of the Hammurabi code conform to these principles.

* *Early Law and Custom*, p. 75.

† *Nārada*, Introduction, ii, 28–30.

More important for our present subject are the conceptions of talion, sympathetic talion and so on. The idea of talion is world-wide. The wrong-doer is to suffer precisely the same injury as he has inflicted. It belongs to primitive ideas, and as society advances it is always mitigated in whole or in part by some system of pecuniary compensation. Very frequently distinctions are drawn between the members of different classes, and for our ultimate purposes it is important to note that this is the case with Hammurabi. For instance we read:—

“If a man has caused the loss of a gentleman’s eye, one shall cause his eye to be lost.

“If he has shattered a gentleman’s limb, one shall shatter his limb.

“If he has caused a poor man to lose his eye or shattered a poor man’s limb, he shall pay one mina of silver.” (§§ 196--8.)

Such rules not only show us the principle of talion in full operation, they also point very clearly to the division of the people into well-marked social strata and to the conception of justice that such divisions had fostered. But while there is nothing uncommon in these provisions the same cannot be said of the provisions for slaying the child of a guilty or negligent parent for the parent’s offence. For example:—

“If a builder has built a house for a man and has not made strong his work, and the house he built has fallen, and he has caused the death of the owner of the house, that builder shall be put to death.

“If he has caused the son of the owner of the house to die, one shall put to death the son of that builder” (§§ 229 ff.).

These enactments are believed to be unique, and it will be necessary to return to them when we consider the mental element in the legislation. For the moment we are concerned with them only as showing that the principle of talion was retained to the fullest extent.

Sympathetic talion is also much in evidence in the code. The idea is sometimes that punishment should be inflicted on the offending member, and sometimes that the instrument of the offence should also be the instrument of the punishment. Numerous examples come from all over the world. One of those given by Post is worth quoting. A German forest ordinance of the year 1546 provides that anybody felling a tree shall have his right hand hewn off with the axe he used in committing his offence.* Here we have both branches of the

* A. H. Post, *Grundriss der Ethnologischen Jurisprudenz*, ii, 239, note 5.

theory exemplified simultaneously. But more frequently a legal rule illustrates one or other branch. Thus we find Hammurabi ordaining, *e.g.*, that the hands of a man who strikes his father shall be cut off (§ 195), while the man who comes to extinguish a fire and "lifts up his eyes to the property of the owner of the house and takes the property of the owner of the house" is to be "thrown into that fire" (§ 25).

Other provisions that show the influence of early ideas are those relating to theft. In treating of the ordinary procedure in early societies all over the world Dr. Post writes as follows:— "He in whose possession the stolen article is found is *prima facie* presumed to be the thief. But if he pleads that he had bought the article or had acquired it by some other honest means from another, he must name that other person and conduct the owner of the stolen property to him. The person so vouched can in turn name another person whom he vouches as his predecessor in title, and so the enquiry proceeds until it ends with somebody who cannot vouch a predecessor in title. This person is then regarded as the thief. This procedure shows many variations in detail."* Similarly in Nārada we read that "where stolen goods are found with a man, he may be presumed to be the thief."† It will be observed that this outline is reproduced in §§ 9 ff. of the code.

With regard to the punishments for theft the Babylonian system conforms here also to well-known types. The early form of remedial procedure in cases of theft is private violence. When society interposes to prevent self-redress or blood feuds, it endeavours to bribe the aggrieved party, not to take the law into his own hands. "In the infancy of society," writes Mr. Post, "it is an important object to the legislator to induce an injured person to have recourse to the public tribunals instead of righting himself, that is to say, constituting himself both lawgiver and judge. That such was really the motive of the legislator we have historic evidence in the declaration of Rotharis, ruler of the Langobards, A.D. 643. He gives the relatives of the slain their election between the primitive vengeance for blood (feud or vendetta), and a composition or pecuniary fine (wergeld or poena) to be recovered by action before the public tribunals. He says that he fixes a high fine in order to induce plaintiffs to forego their right of feud; and

* *Grundriss*, ii, p. 586.

† xiv, 18, cp. vii, 4 and Manu, viii, 201.

implies that he would gladly have abolished the right of feud or private war, but felt that it was too deeply rooted in the habits of his tribe to be extirpated by legislation.*

It is probably in the light of such ideas as these that we ought to contrast the threefold restitution imposed by § 106 on the agent who takes his principal's money with the tenfold restitution that is to be exacted from the dishonest shepherd by § 265. Probably the rule that concerns the shepherds had its first origin in a far earlier and less orderly state of society than that which was called upon to decide on pecuniary transactions involving the relationship of principal and agent. On the other hand it must be noted that this influence alone may be insufficient to account for all the penalties in cases of theft and the allied subjects. It explains the severity of the punishments for theft and many of the penalties involving manifold restitution, but when we read in § 107 that in the converse case the dishonest principal is to pay not a threefold but a sixfold penalty to his agent, we seem to see traces of a moral judgment on the relative heinousness of offences by principals against agents and agents against principals. It must however be noted that this is a question of correct translation.

In another department of law the code exhibits the influence of early ideas greatly weakened. The *patria potestas*, the absolute power of the head of a family over his children, has been greatly lessened and reduced by the time of Hammurabi. Yet there are sections dealing with "cutting off from sonship" (a phrase as to the meaning of which it would be unwise to hazard a guess without knowledge of the original) (§§ 168 ff.) and with the penalties for undutiful sons (§§ 192, 193, 195). There is moreover a section (§ 7) enacting that "if a man has bought from the hand of a man's son, or of a man's slave, without witness or power of attorney, or has received the same on deposit, that man has acted the thief, he shall be put to death." The proprietary restrictions of the Roman *filius familias in potestate* are at once recalled by this section, though it must be confessed that this may only be due to the translation. The following passages from Nârada may, however, be quoted: "In the same way, the transactions of a slave are declared invalid, unless they have been sanctioned by his master. A slave is not his own master. If a son has transacted any business without authorisation from his father, it is also declared an

* On *Gaius*, iii, §§ 189 ff.

invalid transaction. A slave and a son are equal in that respect.* And again: "If a man buys from a slave who has not been authorised (to sell) by his master, or from a rogue, or in secret, or at a very low price, or at an improper time, he is as guilty as the seller."†

Turning now to the geographical influence we may note that we are dealing with a country of great rivers. Hence it is natural to find rules which are readily paralleled from the river civilisation of India. "For a long passage," says Manu, "the boat hire must be proportioned to the places and time." And he adds a remark which is characteristic of the geography of his country: "Know that this (rule refers) to (passages along) the banks of rivers; at sea there is no settled (freight).‡" Hammurabi proportions his boat-hire to the times and class of vessel. Characteristically enough he fixes the exact daily amount.§ Again, when Hammurabi provides that where a boatman has been careless and grounded the ship, or has caused what is in her to be lost, he shall render back the ship which he has grounded and whatever in her he has caused to be lost,|| we may compare Manu, viii, 408 and 409: "Whatever may be damaged in a boat by the fault of the boatmen, that shall be made good by the boatmen collectively (each paying) his share. This decision in suits (brought) by passengers (holds good only) in case the boatmen are culpably negligent on the water; in case of (an accident) caused by (the will of) the gods, no fine can be (inflicted on them)." In this passage "whatever" is referred by some commentators to "merchandise," by others to "luggage."

The geography of the country must be held responsible for other provisions. "On Hammurabi's accession," says Mr. King, "he first devoted himself to the internal improvement of his territory. In the past both Babylon and Sippar had suffered from floods, and the recurrence of these he sought to diminish by erecting dams and cutting canals."¶ "It was an alluvial plain," Professor Sayce writes of the country, "sloping towards the sea, and inundated by the overflow of the two great rivers which ran through it. When cultivated it was exceedingly

* i, 29 ff.

† vii, 3.

‡ viii, 406.

§ §§ 275-7

|| § 237.

¶ *Encyclopædia Biblica*, col. 445.

fertile, but cultivation implied a careful regulation of the overflow, as well as a constant attention to the embankments which kept out the waters, or to the canals which drained and watered the soil.

"The inhabitants were, therefore, necessarily agriculturists. They were also irrigators and engineers, compelled to study how best to regulate the supply of water, to turn the pestiferous marsh into a fruitful field, and to confine the rivers and canals within their channel. Agriculture and engineering thus had their natural home in Babylonia, and originated in the character of the country itself. The neighbourhood of the sea and the two great waterways which flanked the Babylonian plain further gave an impetus to trade. The one opened the road to the spice-bearing coasts of Southern Arabia and the more distant shores of Egypt; the other led to the highlands of Western Asia. From the first the Babylonians were merchants and sailors, as well as agriculturists. The 'cry' of the Chaldeans was 'in their ships.' The seaport of Eridu was one of the earliest of Babylonian cities, and a special form of boat took its name from the more inland town of Ur. While the population of the country devoted itself to agriculture, the towns grew wealthy by the help of trade."*

Thus the geography, combined with the policy of Hammurabi, must be held directly responsible for such provisions as those of §§ 53-56, which deal with the liability of those who neglected to strengthen their bank of a canal with injurious results to other people's property, or had caused damage through careless manipulation of the water, and again for the special provisions protecting watering machines as well as other agricultural instruments (§§ 259 ff.). Special rules of this latter type are not at all uncommon,† and need no explanation. It need scarcely be added that the code testifies clearly to the nature of the products of the country in which it originated—corn, sesame, dates, etc. Indirectly the geography must also be held responsible for the rules necessitated by the great commercial and economic development, and for the history which resulted in so great a royal power. But before passing to that branch of the subject something may be said about the land laws and certain other topics that may conveniently be disposed of at the same time.

* *Babylonians and Assyrians*, p. 8 ff.

† See Post, *Grundriss*, ii, 421-3.

Where agricultural land is leased for payments in kind it becomes to the landlord's interest to compel the cultivator to do his duty in tilling the land energetically by forcing him to pay what the land can be made to bear, even if he has not in fact cultivated it. The code contains provisions to this effect (§§ 42 ff.), which again find a singularly close parallel in India—this time from *Āpastamba*.

"If a person who has taken (a lease of) land (for cultivation) does not exert himself, and hence (the land) bears no crop, he shall, if he is rich, be made to pay (to the owner of the land the value of the crop) that ought to have grown"* On this Böhler writes: "This Sutra shows that the system of leasing land against a certain share of the crops, which now prevails generally in native states, and is not uncommon in private contracts on British territory [*i.e.* in India—H. M. W.], was in force in *Āpastamba's* times."†

Like all other ancient legislators who were concerned with peasant landholders, Hammurabi had to face the question of giving some relief to poor peasants who had mortgaged their holdings and were prevented by bad seasons from meeting their obligations. The first section which deals with this (§ 48) is so humane that it should be quoted *in extenso*:

"If a man has a debt upon him and a thunderstorm ravaged his field or carried away the produce, or if the corn has not grown through lack of water, in that year he shall not return corn to the creditor, he shall alter his tablet. Further, he shall not give interest for that year."

The following sections (§§ 49-52) appear to be conceived in a similar spirit and to provide relief for those who handed over their fields to their creditors for cultivation. So far as an opinion can be formed they seem to embody well-devised and equitable rules for the protection of the borrower from oppression by the usurer.

But if Babylonia was a land of rivers and tilth, it was also a country of pastures and live stock. Hence the code contains provisions for the remuneration of herdsmen, for their responsibility for the protection of their charges and for their liability for injury inflicted by them on the property of others. Owing to the similarity of conditions we once more find admirable parallels to all these in the Indian books.

* *Āpastamba*, ii, 11, 28, 1.

† *Sacred Books of the East*, vol. ii, 166.

Thus with § 261* we may compare *Nārada*, vi, 10. For (tending) a hundred cows, (a heifer shall be given to the herdsman) as wages every year; for (tending) two hundred (cows), a milch cow (shall be given to him annually), and he shall be allowed to milk (all the cows) every eighth day.

Similarly when we read the sections† relating to the liability of shepherds we are reminded of Indian provisions.

Thus Manu writes: "During the day the responsibility for the safety (of the cattle rests) on the herdsman, during the night on the owner, (provided they are) in his house; (if it be) otherwise, the herdsman will be responsible (for them also during the night).

"The herdsman alone shall make good (the loss of a beast) strayed, destroyed by worms, killed by dogs or (by falling) into a pit, if he did not duly exert himself (to prevent it).

"But for (an animal) stolen by thieves, though he raised an alarm, the herdsman shall not pay, provided he gives notice to his master at the proper place and time.

"If cattle die, let him carry to his master their ears, skin, tails, bladders, tendons, and yellow concrete bile, and let him point out their particular marks.

"But if goats or sheep are surrounded by wolves and the herdsman does not hasten (to their assistance), he shall be responsible for any (animal) which a wolf may attack and kill.

"But if they, kept in (proper) order, graze together in the forest, and a wolf, suddenly jumping on one of them, kills it, the herdsman shall bear in that case no responsibility."‡

And with §§ 263, 267, we may also compare *Āpastamba*, ii, 11, 28, 6. "If (a herdsman) who has taken cattle under his care allows them to perish, or loses (them by theft, through his negligence), he shall replace them (or pay their value) to the owners."

Rules of this kind spring from the very nature of the contract between an owner and his shepherd. The whole object of employing a shepherd is to have a guardian of the sheep who shall be responsible for their safe custody. Ac-

* § 261 runs as follows :— If a man has hired a herdsman for the cows or a shepherd for the sheep, he shall give him eight Gur of corn per year.

† §§ 263–267, especially the last two of these sections, providing that where animals are lost through an act of God, or a lion's attack, the loss is to fall on the owner, while the shepherd is liable for losses through negligence.

‡ Manu, viii, 230, 232–6. See further *Nārada*, vi, 11–17.

cordingly he must always be liable for loss caused through his own negligence or want of skill. On the other hand, in cases where loss occurs through some cause that is beyond his control and that could not have been prevented through any exercise of care or skill, *e.g., vis major* (Hammurabi's lion), act of God, inevitable accident, the principle *res domino perit* necessarily finds application in the absence of agreement to the contrary.

The kindred question of the liability for damage done by sheep is dealt with by Hammurabi in §§ 57 ff., making the shepherd responsible for the depredations of his sheep on green corn. An Indian parallel may be cited.

"If damage is done by cattle, the responsibility falls on the owner. But if (the cattle) were attended by a herdsman (it falls) on the latter. (If the damage was done) in an unenclosed field near the road (the responsibility falls) on the herdsman and on the owner of the field. Five mâshas (is the fine to be paid) for (damage done by) a cow, six for a camel or a donkey, ten for a horse or a buffalo, two for each goat or sheep. If all is destroyed (the value of) the whole crop (must be paid and a fine in addition)."*

It will be seen that with some differences of detail the principle is substantially the same.

Another department of the law may be traced to the influence of the geographical situation of the people and its consequent economic development acting on marriage customs that in themselves are not exceptional. Gifts by bridegrooms to the parents and relations of the bride, and dowries given by the father on his daughter's marriage are common to many races. In Babylonia, owing to the general wealth, these gifts became of great importance and developed a number of rules relating to their disposition in various events. For example, the marriage portion being the wife's will generally follow her in the event of a dissolution (§§ 138, 142, 176, etc.). It descends to her children, not to the children of another wife and so on (§§ 167, 173, 174, etc.).† These rules call for no more than passing mention here.

The geography of Babylonia was probably the chief influence to which the formation of a strong centralised monarchy may be attributed, and accordingly it will be in place at this stage to notice the group of sections dealing with certain royal

* Gautama, xii, 19-26 ; cf. also Manu, viii, 239-241.

† An excellent note on these by Professor E. Cuq will be found at the end of Father V. Scheil's *La Loi de Hammurabi*.

officials called by Mr. Johns gangers and constables. The property which such officials enjoyed by virtue of their office is rendered inalienable (§§ 35-38). On the other hand they are subjected to special provisions to secure their efficient attendance to their duties. The details are not at present clear in translation: but the general purport of the rules appears sufficiently. Hammurabi enacts that for the benefit of the state these men shall enjoy special rights and be subject to special duties. Clearly he protects their property in order to provide for efficient public service. Similarly the law at present in force in this country contains special provisions as to the effect of a bankruptcy on the pay of an officer of the army or navy or a civil servant.

The marriage laws give effect to two or three principles. Generally the marriage tie is protected, but where the husband has been taken in captivity, poverty is recognised as justifying the wife in entering the house of another (§§ 134). The wife is expected to be economical, attend to her household and be dutiful to her husband (§ 142 ff.). The man is regarded as having a right to obtain children. Various provisions regulate divorce, and would apparently act in general as checks on the exercise of that power.

Of this and many departments of the law it may be said generally that there is evidence of that common sense without which no code of this length could possibly have been devised for a people of the material civilisation of the Babylonians, and that they further testify to the well-developed economic instincts of the people. Ethical considerations only play a very small part.

We have seen something of the legal machinery that was inherited by the contemporaries of Hammurabi from far more primitive times. It is necessary also to notice the machinery of a more modern type and the use that was made of it. The general diffusion of writing made the duly authenticated deed the best proof of commercial transactions. We find provisions in the code which appear to be inspired by the same motive as the English Statute of Frauds.* It was, no doubt, "for prevention of many fraudulent practices" that the Babylonian legislator enacted (§§ 104 ff.) that "a sealed memorandum of the money he has given to the merchant" should be required in certain disputes between "merchants" and "agents," and that the depositor who effects his deposit without "witness and

* 29 Car. I., c. iii.

bonds" should have no remedy if the depositary denied his title (122 ff.). The legal statesmanship of such provisions is beyond question.

Other legal tools of ancient Babylonia find analogies in modern English law. For example, a father making a settlement of a field or a garden on a "lady, a votary or a vowed woman," could if he so desired give her an absolute testamentary power over the property to the exclusion of her brothers (§ 179). On the other hand he might refuse to do this. In that case she only had a life interest without power of alienation, and even this interest was subject to a right on the part of her brothers to undertake the cultivation of the property and pay her corn, oil and wool, according to the value of her share. Indeed, speaking generally, it may be said that the rules of succession and settlements are such as usually spring up in communities in an advanced economic condition.

In another branch of the law the machinery adopted is of a less modern and permanent type. The Babylonian legislator appears to have sought to prevent disputes as to the remuneration for services rendered by fixing the amount by statute, and accordingly we find the fees for the work of doctors, veterinary surgeons, builders, etc. These rules are usually flanked by others, providing more or less savage punishment in the event of the contractor's showing want of care or skill. Thus in the case of certain unsuccessful operations, the doctor is to lose his hands (§ 218) if his patient is a "gentleman." This doctrine of the legal responsibility of a physician for failure may be paralleled from India. This we read in Vishnu:—

"Also, a physician who adopts a wrong method of cure in the case of a patient of high rank (such as a relative of the king's) [shall pay the highest amercement]; the second amercement in the case of another patient; the lowest amercement in the case of an animal;* similarly Manu says, "All physicians who treat (their patients) wrongly (shall pay) a fine: in the case of animals, the first (or lowest); in the case of human beings, the middlemost (amercement)."[†] An Indian commentator on this latter passage adds, "But this refers to cases when death is not (the result of the wrong treatment); for if that is the case the punishment is greater."

It is interesting to note the gradation of ranks leading in

* Vishnu, v, 175-177.

† ix, 284.

India as in Babylonia to differential treatment of the physician's failure. Want of skill or success is more heinous when the victim is great than when he is little.

Of the intellectual element in the law we have already seen something, but an example may be taken of the way in which a principle relating to property is worked out. We may select for this purpose the aphorism *res domino perit*—if property is destroyed, the loss falls on the owner. In the simplest cases the principle is so obvious that no question can possibly arise. If I accidentally drop my handkerchief into the fire, I am the only person on whom the loss can fall. The same holds good if my corn or my sheep are destroyed by a storm or a lion while in my custody. But not all the cases that may arise are as clear as these. For instance, A's field is being cultivated by B, who in return gives him a proportion of the produce. If the calamity occurs to that which remains in the field after A has received his proportion, what is to be done? Here Hammurabi rightly decides that the ownership is definitely fixed at the time of the receipt. Therefore, the produce remaining in the field had become B's, and B's only. Consequently it is on B alone that the loss must fall (§ 45). If, on the other hand, A had not received his share, the two are joint owners, and the loss must be divided "according to the tenour of their contract" (§ 46), *i.e.*, proportionately, as Mr. Pinches renders it. In each case the loss falls on the owner. Again, suppose that A's slave dies of purely natural causes while in the house of B, who has lawfully distrained on him. Here again *res domino perit*; the owner must bear the loss (§ 115). Or if B has hired A's ox and "God has struck it and it has died," or again in the case already cited, if by the act of God or *vis major*, A's sheep have perished while under the charge of C, a shepherd, the rule is the same (§§ 249, 266). On the other hand, in some cases of purchase there was a right of rescission within a given time (§ 278), and here the principle is subject to this rule. The adoption and application of principles of this sort are necessary incidents of the growth to maturity of any legal system, but they show the sound sense and grasp that characterise certain portions of the Babylonian code.

On the other hand nothing very satisfactory can be said of the general treatment of the intellectual element in offences. The limits of Babylonian reflection on the matter are only too clearly shown. The authors of the code are usually willing to excuse anybody who acted under compulsion or under a

misapprehension induced by another's fraud. For example, the agent who, while on a journey, is robbed by an enemy, is recognised as innocent (§ 103), and so is the trader who has been deceived into wronging the owner of a slave (§ 227). They go further and recognise that the owner of a vicious ox should only be punished if he had reason to know that the animal was vicious and had failed to take proper precautions to prevent its inflicting injury (§§ 250-2). They even realise that in a fight a blow may be given that has unexpectedly grave results (§§ 206-208), and that in such a case the mental element must be taken into consideration in determining what the legal consequences of the action should be. Once more, in estimating a wife's conduct they consider her character as evidenced by her past, and also her husband's treatment of her (§ 42 ff.). But further than this they do not go. They never realise in its entirety the maxim, *non est reus nisi mens sit rea*. Indeed they often fall immeasurably below it. The builder who does his work carelessly or unskilfully or dishonestly, forfeits his life if the house kills the owner (§ 229), though he certainly had no murderous intent. Still worse, if the collapse of the building results in the death of the owner's son, the innocent son of the builder is to be killed. In his case at any rate both mental element and overt act are lacking. No doubt much must be attributed to the primitive condition of legal reflection in Hammurabi's Babylonia. Yet these provisions are more barbarously unjust than any known legal rule of any primitive people. And so we come to the last branch of the Babylonian section of our enquiry with the question, What has the code to tell us of the character and ideals either of its framers or of the nation for which it was intended? We have seen that it is the work of men whose intellectual powers are in some respects worthy of admiration; can the same be said of their legislative ideas?

The answer, however reluctantly given, must in the main be unfavourable.

In the first place the code is on the whole of a savage type. It is true that the comparative material fully explains the origin of the barbarous penalties that we have encountered; but it also does much to increase our wonder at finding that penalties so cruel should have been retained in such numbers at so advanced a stage of material civilisation. The extreme limit is reached when death is inflicted by way of talion not on the person actually responsible for the offence it is sought to prevent, but on his innocent child. Many legislators have

punished the innocent with the guilty, or the innocent in mistake for the guilty; it was reserved for the Babylonian or those from whom they may have derived these rules to undertake knowingly and of set intent to punish the innocent in lieu of the guilty. No doubt the punishment was usually or always commuted. Not all offenders can have had children on whom could be inflicted the penalties prescribed by "the judgments of righteousness which Hammurabi the mighty king confirmed and caused the land to take a sure guidance and a gracious rule." Nevertheless, the sections remain on record to show the ideas of justice that were prevalent in ancient Babylonia and to illustrate the character of the people. And this savagery reappears in one penalty after another. Nowhere is the operation of the principle of talion limited to any degree.

Secondly, for good or for evil, the protection of property is the paramount object of the code to the exclusion of almost all other ideals. To some extent, this is inevitable, and not at all remarkable. Every legal system designed for a people that has attained to some degree of economic maturity must necessarily be concerned with that which constitutes the main subject matter of their daily occupations. But in Hammurabi's code the interest in property leads to some regrettable principles. The penalties for theft are, in some cases, altogether excessive, as may be seen by comparison with the rules of the Romans—a people who were certainly not conspicuous for gentleness. When the Romans adopted manifold restitution their maximum penalty was fourfold. Hammurabi runs up to a thirtyfold payment. On the other hand, he recognises the duty of the government to secure public safety. In the prologue to the code he boasts of himself as "the wise, the active one, who has captured the robbers' hiding-places, sheltered the people of Malkâ in (their) misfortune, caused their seats to be founded in abundance," and to his credit be it said that his ideas of the duty of a government in this respect found legislative expression in §§ 23 ff., which provide that where a man is robbed by a brigand, "the city and governor in whose land and district the brigandage took place shall render back to him" compensation if the brigand has not been caught. A similar view is found in India.*

Moreover, in two instances, other considerations are allowed to modify the claims of property: the peasant whose power of payment is destroyed by natural misfortunes enjoys the benefit

* See Gautama, x, 46-47; Vishnu, iii, 66-67.

of protection against the demands of the moneylender (§ 48), and again the wife and child of a debtor recover their liberty after only three years' service to the creditor (§ 117).

Thirdly, it may fairly be said that Hammurabi expects every man to do his duty, and holds that he ought to be properly remunerated for his work. With this object, we find numerous provisions dealing with the remuneration of various craftsmen and inflicting punishment for unsatisfactory work. A similar idea appears in the provisions that are inspired by the Babylonian theory of wifely duty. And this brings us to a fourth characteristic of the code, its treatment of various trades and crafts. Hammurabi believed that he could best regulate by legislation matters that might have been left to contract or judicial discretion. Probably he knew the circumstances of his own age and country best, and was right in taking this course. At any rate we have no materials which would justify us in blaming the grandmotherliness of his legislation.

Fifthly, the Babylonian conception of justice—like that of the Indian law-books—is fundamentally warped by the caste system. Throughout there is one law for the rich, another for the poor. The dignity of man was unknown in Babylonia.

It is probable, too, that the provision for drowning a wine merchant who makes the price of wine less than that of corn (§ 108), though it sounds a little strange to our ears, is really a temperance enactment which should be noted with approval.

The highest ideals of the code may be summed up very briefly. Hammurabi held that it was the duty of "the shepherd of the people" to make them dwell safely and prosperously. His ethics, his morality, his theory of legislation, in so far as they are not merely inherited from past ages, are alike economic.

On the other hand it would appear that he did give his people strong and certain rule with its attendant benefits, and it must be remembered that even inferior laws, if enforced rigorously and impartially, are greatly preferable in their practical consequences to a legislation that is not applied strongly and uniformly, even if the latter be superior on paper.

It is a misfortune for the posthumous reputation of the Babylonian king, that in our days circumstances necessitate the comparison of his famous statute with the noblest monument of legislative idealism that history has produced. The interest that is felt in Hammurabi's code by the general public is largely due to the supposed possibility that it may have exercised some considerable influence on the law of Israel. The Babylonian

system could far better stand a comparison with the law-books of India, the law of Imperial Rome or the law of England in, say, the eighteenth century, than with the work of him whose labours were directed to teaching that "man doth not live by bread only, but by all that cometh out of the mouth of the Lord doth man live."*

In dealing with the second division of my subject, it is not my intention to answer those who maintain that Hebrew law was borrowed from or greatly influenced by the Babylonian system. Such a theory is so absolutely preposterous on the face of the legislations, that no comparative jurist could be found to defend it, and I should not be justified in wasting the time of this Society in discussions of this nature. A word may, however, be given to the patriarchal customs evidenced by the book of Genesis. It is sometimes said that the patriarchs lived under the code of Hammurabi. This result is attained by the familiar method of emphasising such portions of the evidence as appear to support the theory, while leaving out of account all the other relevant facts. For example, the Hebrew patriarch, like the Roman *pater familias*, exercised absolute powers of life and death over the members of his household, including his children and daughters-in-law. The code of Hammurabi, on the other hand, shows us a society in which the paternal power had long since been reduced to more moderate dimensions. There can, therefore, be no question of the code's being the law of the patriarchs. On the other hand, there are resemblances between the early Hebrew customs and the Babylonian law; and it is not impossible that these are due either to community of origin or to direct influence.

The comparisons I have to suggest will, I trust, be more fruitful of historical profit than any speculations of influence which are fore-doomed to sterility. I purpose to take up the factors and influences in the formation of the legislation that we have seen at work in Babylonia, and show how they operated in ancient Israel. But this process can only be repeated with a necessary difference. While in the older system we had only to note the uncontrolled operation of such ideas as the conception of talion, in the younger we should continually have to stop to examine the checks and restraints that were imposed on them by the theory of legislation that inspires the work throughout.

It is for this reason that before embarking on the considera-

* Dt. viii, 3.

tion of the various formative influences that we have seen at work in the code of Hammurabi, we must consider the distinctive currents of thought that dominate the whole. The historical student of, say, English legislation in the nineteenth century, is compelled to take into account the great intellectual forces that moulded its history—such as utilitarianism, *laissez faire*, collectivism. The nearest analogy in the case of Hammurabi (if there be one) appears to be the theory that extensive state regulation is for the benefit of the community, and the main interest lies in the political, social and economic conditions—in the external elements of human life. In the case of the Pentateuchal legislation the exact opposite is true. Here the internal and spiritual compel our fascinated gaze, and the external is of interest mainly in so far as it manifests the influence of the former. The greatness of Israel lies in his soul.

The jural laws contained in the Mosaic legislation form a portion of a larger corpus which was given to the Hebrew tribes by the God with Whom at the period they entered into a special relation. By an act that is unparalleled in history a God took to Himself a people by means of a sworn agreement. Some words that are fundamental for our purpose must be quoted from the offer: "Now, therefore, if ye will obey my voice indeed, and keep my covenant, then ye shall be a peculiar treasure to me from among all peoples: for all the earth is mine; and ye shall be unto me a kingdom of priests and a holy nation."* The views here expressed dominate the legislation. Holiness—the correlative holiness to which the Israelites must attain because the Lord their God is holy†—embraces much that is not germane to our subject this afternoon, but it also covers the whole field of national and individual righteousness. The duty to God that is laid upon the Israelites in these words is a duty that has practical consequences in every phase of social life. I have already quoted a sentence from Sir Henry Maine in which he speaks of the uniformity with which religion and law are implicated in archaic legislations. There is a stage in human development where life is generally seen whole, and it is to this stage that the Pentateuch belongs. But no other legislation so takes up one department of man's life after another and impresses on them all the relationship of God and people. Perhaps nothing will so clearly bring out my meaning as a statement of some of the more fundamental differences between the Pentateuchal legislation and the old

* Ex. xix, 5 ff.

† Lev. xix, 2

Indian law-books which often provide excellent parallels to it. Those to which I desire to draw particular attention are as follows. The Indian law-books have no idea of national (as distinct from individual) righteousness—a conception that entered the world with the Mosaic legislation and has perhaps not made very much progress there since. There is no personal God: hence his personal interest in righteousness is lacking: hence, too, there can be no relationship between God and people: and while there is a supernatural element in the contemplated results of human actions there is nothing that can in the slightest degree compare with the Personal Divine intervention that is so often promised in the Pentateuchal laws.* The caste system, like Hammurabi's class system, leads to distinctions that are always inequitable. The conception of loving one's neighbour and one's sojourner as oneself are alike lacking. The systematic provisions for poor relief are absent, and the legislation is generally on a lower ethical and moral level, while some of the penalties are distinguished by the most perverted and barbarous cruelty. All these points are embraced in the special relationship of the One God and the peculiar treasure with its resulting need for national and individual holiness.

The primitive ideas of proof by oath or ordeal meet us again in Israel as in Babylonia. After what has already been said they need not detain us. Sympathetic talion only occurs once in the jural laws, though it holds a rather more prominent place in the precepts which have purely supernatural sanctions and are for that reason excluded from comparison with Hammurabi. Talion occupies a somewhat more important position. I have elsewhere given my reasons for thinking that it was always subject to composition except in the case of offences involving capital punishment.† Be that as it may, it is instructive to note that the principle is carefully controlled. In lieu of the penalties striking at innocent children we read, "The fathers shall not be put to death for the children, neither shall the children be put to death for the fathers: every man shall be put to death for his own sin"‡—a provision that was perhaps called forth by some legislation or custom that resembled

* *E.g.*, "And if ye shall say, what shall we eat the seventh year? behold, we shall not sow, nor gather in our increase; then I will command my blessing upon you in the sixth year, and it shall bring forth fruit for the three years" (Lev. xxv, 20 ff.)

† *Studies in Biblical Law*, ch. vi.

‡ Dt. xxiv, 16.

Hammurabi's code. Again the principle of talion is here free from all class differentiations, which are repugnant to the spirit of the Mosaic law, whose only favourites are the weak and helpless. The principle of making manifold restitution for theft, and in certain kindred offences, is found here as in so many other ancient legislations: but the provisions are far more equitable and humane than those of Hammurabi.

On the other hand the laws relating to filial duty show how much nearer the age of Moses was to the days of unrestricted paternal power than the age of Hammurabi, death being the penalty for striking a parent. It should, however, also be pointed out that the religious element enters into the conception, filial duty being regarded as a constituent in holiness.

In dealing with the Hebrew system we have to assign far more weight to history and far less to geography than in the Babylonian. The Hebrew tribes and their customs had a more varied past to look back upon than their Babylonian kinsmen. They had been nomads who for some time had sojourned in Canaan, and had even had some agricultural experience there. Thence they had migrated to Egypt, where again they had tilled the soil, and during the legislative period they were homeless wanderers in a desert, making ready to fall upon the land they yearned to possess. Without doubt the geographical influences must have been effective as well as varied, but owing partly to the history and partly to the spiritual nature of the people they do not exercise the predominating power that they are seen to possess in Babylonia. It will be well to treat the historical and geographical factors together.

The land for which the legislation was intended was not a land of great rivers and fertile plains irrigated by canals, a land of sesame and dates, "but a land of hills and valleys that drank water of the rain of heaven" (Deut. xi, 11); "a land of brooks of water, of fountains and depths springing forth in valleys and hills, a land of wheat and barley and vines and fig trees and pomegranates, a land of oil, olives and honey, a land whose stones are iron and out of whose hills thou mayest dig copper" (Deut. viii, 7-9).

It is at once obvious that in view of these natural features we cannot look for any provisions relating to navigation or canals. It is equally obvious that the economic condition of the people was necessarily far more primitive than that of Babylonia. Hence we shall not find the well-developed system of trades and industry. There are a few rules dealing with the simplest cases of danger by or to cattle, but this is one of the

departments of law that shows the greatest similarity all the world over and calls for little comment. The real interest lies elsewhere—in the land laws, the slave laws, the tribal theory and so on. These subjects we must now consider.

The land laws are the product of many independent ideas and circumstances. Their consideration is in place here because the conditions of the problem and the opportunity for grappling with it show the influence of history with such singular clearness. First such a system as that expounded in the 25th chapter of Leviticus could only be put forward by one who had to work on what is so very rare in history—a clean slate. In other words the system of land tenure here laid down could only be introduced in this way by men who had no pre-existing system to reckon with. Secondly, there is (*mutatis mutandis*) a marked resemblance between the provisions of Leviticus and the system introduced in Egypt by Joseph (Gen. xlvii). The land is the Lord's as it is Pharaoh's; but the towns which are built on that land are not subject to the same theory or the same rules. Perhaps the explanation is that Joseph's measures had affected only those who gained their living by agriculture, *i.e.*, the dwellers in the country. Thirdly, the system shows the enormous power that the conception of family solidarity possessed in the Mosaic Age—a conception to which we shall have to return directly. And fourthly, the enactment is inspired and illuminated by the humanitarian and religious convictions and ideals to which reference has already been made.

In the economic sphere the contrast between Moses and Hammurabi is very marked. Taking human property first we find that the Babylonian code is careful to guard the rights of slave owners, inflicting the death penalty on those who effectively aid runaway slaves (§§ 15–20). Contrast with this the Hebrew provisions, "Thou shalt not deliver unto his master a servant which is escaped from his master unto thee: with thee he shall dwell in the midst of thee, in the place which he shall choose within one of thy gates, where it liketh him best: thou shalt not oppress him" (Deut. xxiii, 15ff.). It has been said with some truth that such provisions can more easily be enacted for a primitive community than at a more developed economic stage, but this is only a portion of the truth, and if taken by itself a very misleading portion. Economic circumstances may have been one of the conditions of the enactment of the rule (at any rate in its present form): they could not provide its *Motive*. The difference between the two legislations

here indicated is further emphasised by other provisions which secure the slave from mal-treatment by his master. Here it cannot be said that economic development necessitates or justifies the Babylonian code. In a word, where Hammurabi safeguards the rights of property, Moses for the first time in history protects the rights of humanity.

The same holds good of the laws relating to loans, pledges and poor relief. The legislator's object is always the same—to give practical effect to that doctrine of holiness which conceives the love of God's creatures as part of the Israelite's duty towards his God.

We now come to two points that are best treated together, the strength of the family and tribal sentiment, and the weakness of the central administration. These appear to be due mainly to historical causes. In lieu of a people subjected to a strong centralised royal power with class distinctions, as were the Babylonians, history had made of the Hebrews a loose aggregation of undisciplined tribes unaccustomed to community of government, community of interest or community of action, knowing little of class distinctions, but profoundly imbued with family sentiment. The enormous strength of this feeling is to be seen in the influence it exercised on the law of succession to land. Here the possible effect of the Mosaic provisions led to a deputation of remonstrance, which pointed out that the possessions of heiresses might by their marriage become permanently vested in members of another tribe. It was accordingly enacted that in such cases they must espouse men of their own tribes, but the incident and the resulting law testify very vividly to the nature of the feeling. It is probably to this feeling of tribal separateness that we should attribute, in part at any rate, the great defect of the system—the failure to create a central government, which in those days could only have been effected by giving hereditary authority to one family. Probably no tribe would have submitted to a king who was chosen from some other tribe. Neither Moses nor Joshua appears to have had a son who was capable of ruling, and for the purposes of conquest a general was the only possible head of the people. Hence the defect was probably inevitable, but the weakness of the Hebrew system at this point is the measure of the strength of the Babylonian. The strong security for life and property, the compensation for robbery that Hammurabi could afford were out of the question for tribes with the historical antecedents of the Israelites. It should further be pointed out that the geographical character of the country, with

its hills and valleys and the survival of a large alien population filling in the interstices between the Hebrew settlements, must have made a centralised national power impossible for long after the days of Moses.

With regard to legal machinery everything is very primitive. With the single doubtful exception of the bill of divorce, the use of writing by private persons in the ordinary course of every-day life is never contemplated. Hence we find, as in so many primitive communities, that legal business was habitually transacted in the most public place possible, *i.e.*, at the gate of the city, where the facts would necessarily become known to those who would be judges or witnesses or both in case of any future dispute.

Turning now to the intellectual element in the law we find that the state of legal reflection is also very primitive. A distinction between intentional murder and other forms of homicide is introduced for the first time, and in terms that show clearly how difficult the conception was to contemporaries of Moses. The same holds good of the law of rape. In the case of the savage ox the Hebrew legislator reaches the same stage of reflection as the Babylonian, but the undeveloped state of thought is further attested by sacrificial provisions relating to sins committed in ignorance and wilfully, which, however, strictly fall outside the scope of this paper. An act committed in ignorance may be a sin, calling for atonement. On the other hand no atonement can be made for wilful sins, and all sins are regarded as either ignorant or wilful. Such conceptions are the best witness to the extremely archaic nature of the legislation.

To sum up the results of our survey: In dealing with any legal system it is necessary to separate the accidental from the essential, the universal from the characteristic. Every progressive race necessarily passes through certain stages of growth. Every race will be affected by its environment, the surroundings of its life, the tasks that it must accomplish if it wishes to exist. Every progressive race will have to deal with certain problems that arise in all countries, the problems presented by those who kill or injure their neighbours, the ownership of property of various kinds, the commonest forms of social intercourse, and so on. In some of these cases all men of ordinary ability will reach substantially the same solutions; but in others, the interplay of the various factors causes considerable variety. The study of the results is a task of some interest, but it must yield in fascination to the consideration of national and legislative ideals and national character.

These two are inseparably linked, for there must be a more or less close correspondence between the character of the legislation and the sentiments of the governed. Legislative ideas of our own and past ages readily present themselves to the mind in abounding number— $\tau\omicron\varsigma\ \epsilon\upsilon\ \xi\eta\nu$ —with all that it meant to the Athenian; the imperialism of Rome; liberty, equality, fraternity; utilitarianism; *laissez faire*, *laissez passer*; nationalism, and so on. If we interrogate the Babylonian code for its ideas, we learn that its watchword is "Security and Prosperity"; if the Israelitish, we receive the answer "Holiness."

The fate of the legislations has corresponded to their respective characters. A generation or two after the death of Hammurabi, no man could have doubted that his work had been successful; probably few would have said as much of the work of Moses at a corresponding interval after he was gathered to his fathers. "In those days there was no king in Israel; every man did that which was right in his own sight." But to-day the verdict is different. The code of the Babylonian had its period of utility, and was then flung aside like an old shoe. For thousands of years its very name was forgotten, and to-day, when the bulk of it has been exhumed from the dust of centuries, we find that it is without value for our life or its problems. The people to whom it was given have passed away after doing their part for the material and intellectual advancement of the world, but without contributing one iota to its higher life. The work of the Israelite, on the other hand, has given to his own people the quality of immortality and has borne mighty fruit among other peoples in both hemispheres; so far as human vision can see, it will continue to do so in ever-growing measure; and throughout a century of generations, the work of him who was powerless to create machinery that could maintain public security in the national territory for a single generation, has remained for millions of people all over the world *par excellence* the law.

DISCUSSION.

The CHAIRMAN (F. S. BISHOP, Esq., M.A., J.P.) expressed the thanks of the meeting to Mr. Wiener for his able paper. He then asked for discussion, pointing out that it was once again shown how any comparison of the Sacred Book with contemporary documents only serves to exalt the former.

Mr. ST. CHAD BOSCAWEN acknowledged the ability and interest of the paper, but differed from the writer in some not unimportant points. In the first place he did not think that the religious element was so absent as Mr. Wiener would have the meeting believe, from the code of Hammurabi. He would instance the perpetual reference made to the oath by god—that was of course the private god and goddess whom each man had in honour (reference to this would be found in the Babylonian penitential psalms). The whole introduction to the code and the first few paragraphs of the epilogue were full of strong nationalist and religious feeling, and the laws were alleged to emanate from the sun god.

To what extent the government and religion had been centralised might be seen from the stele placed in the Temple of the god Merodach. The state was just on the edge of a transition from local to centralised government, and so it was in religion: the change was due to Hammurabi. Merodach, the local Babylonian god, was fast becoming the national deity. For religious sincerity they might look to the prayers of Nebuchadnezzar to Merodach. If the name of Merodach were taken from these they might well be prayers from the Bible, with their references to “the city thou lovest” and “the people whom thou favourest.”

In his opinion the code of Hammurabi stood by no means alone, but was founded on a code four or five centuries older (not merely Sumerian fragments), which was drawn up on much the same lines, as might be seen from the cylinders of Godir. The object of this earlier code is laid down as being “to protect the weak from the strong, that the poor be not oppressed, and the widow and orphan be not robbed.”

He differed from Mr. Wiener in his remarks on p. 163. It could not be said that Hammurabi's code was in any degree thrown away. From it came all the commercial legislation of Babylonia to within a century of the Christian era, and it was used and studied right up to the Christian era (the cuneiform script was known to have been in use as late as 47 B.C.).

A grave fault of the lecturer would seem to be the enormous weight attached to the book of Deuteronomy: is this really a Mosaic book?

Mr. WIENER.—Certainly, in his opinion it was (hear, hear).

Is it not rather the legislation of a settled people with a

king and a centralised worship, modelled exactly on the code of Hammurabi? First the Historical Introduction, then the laws and legislation, many of which were identical with those of Hammurabi, then as in the other code an epilogue of blessing and cursings. This resemblance in structure was more than remarkable.

The form of the book of Deuteronomy, though unique in the Bible, was that common to all documents of the Babylonian civilisation. All ended in the series of blessings and cursings. In fact, the whole form and phraseology of the book of Deuteronomy pointed to a Babylonian model.

He had but one more remark to make, concerning the treatment of the slave. Meisner had shown that the principles of humanity had full play here. When the slave grew old or was injured, or after long and faithful service, the master must give him bread and oil for the rest of his life.

Mr. WIENER, in replying, said that it did not appear to him that Mr. Boscawen had made good his criticisms on material points. He regarded the oaths on which Mr. Boscawen relied as extremely commonplace. Such oaths were to be found in all ancient legislation, so much so, that one came to look on them as mere stage property. Naturally every nation took the oaths in the forms that harmonised with their particular religious observances, but the fundamental idea—that of appealing to higher powers in certain cases for proof—was universal. With regard to the introduction and epilogue he had purposely refrained from using them, and also the materials in the contract tablets for this paper, because he had no knowledge of cuneiform, and felt that in the circumstances he had better heed the warning given by Mr. Johns not to build elaborate theories on the introductory and concluding sections of the code. Professor Kohler had promised to utilise the material afforded by the contrasts in the second volume of Hammurabi's *Gesetz*, and as he co-operated with an Assyriologist, Dr. Pusey, he could safely undertake work that would be dangerous for a lawyer who did not enjoy expert assistance. With regard to the criticism that there had been endless legislation he had endeavoured to bring out in his paper the fact that the code merely represented one stage in a long development. Nor again had he meant to convey any notion that the code was not acted on for a long period. He meant that while the code was useful in its day it did nothing whatever to elevate humanity in the long run.

As to the authorship of Deuteronomy he was satisfied that the whole of the laws and speeches were (subject only to the qualification introduced by textual criticism) Mosaic, *i.e.*, the work of Moses, in the language of Moses. Unfortunately it would take too long to deal in detail with Mr. Boscawen's arguments on this point, but he could refer them to his published writings on this. With regard to the view that Deuteronomy was drawn on the model of Hammurabi's code he could only express his unqualified dissent. Unlike any other known legislation Deuteronomy and certain other portions of the Pentateuch were in form sworn agreements. Instead of a legislation enacted by some law-making power and imposed by it on the people, we find a series of internal agreements (called covenants) of which the laws were terms. Deuteronomy in many respects resembled an English deed. Its central speech began with date and title, followed by a recital of a former covenant between the same contracting parties, then came the body of the agreement in properly articulated form, then the directions for its due execution, the blessings and curses, and lastly a colophon saying that this was a covenant made in addition to a former covenant. The blessings and the curses replaced the form of jurat which would have occurred in a covenant between men. Such sworn covenants between men who could only appeal to a Divine tribunal might be likened to treaties which in the Europe of the middle ages and in many other societies had often been ratified by oaths. In this case God was a party to the covenant, and so there was no external superior power to which both parties could appeal to enforce their right. Hence the jurat was replaced by blessings and curses. Allowing for this and the fact that it belonged to a state of society in which sworn agreements had not yet been replaced by contracts, Deuteronomy *mutatis mutandis* resembled in form a modern deed. Hammurabi's code, on the other hand, showed not the least approximation to this type. Assyriologists should bring to bear the knowledge of comparative jurists before they put forward theories of influence.

As to the contracts relating to the support of slaves, these in no way altered the provisions by which Hammurabi guarded the rights of owners or the contrast with the Mosaic enactments.

495TH ORDINARY GENERAL MEETING.

MONDAY, APRIL 5TH, 1909.

DAVID HOWARD, ESQ., F.C.S., F.I.C. (VICE-PRESIDENT),
IN THE CHAIR.

The Minutes of the previous Meeting were read and confirmed.

Mr. E. Carus-Wilson, of High Barnet, was elected a Missionary Associate of the Institute.

The following paper was then read by the Author :—

*EZEKIEL'S VISION OF THE DIVINE GLORY.**

By C. A. CARUS-WILSON, M.A., M.Inst.E.E.

FEW parts of Old Testament literature present greater difficulty than the account given by Ezekiel of his Vision of the Divine Glory. The key to its elucidation is, I believe, to be found in recognising that the supernatural revelation given to the Hebrew prophet was based on a natural phenomenon, a rare and splendid appearance in the heavens, which became henceforth a symbol and shadow of the Heaven of heavens.

It will be interesting in the first place to notice exactly where Ezekiel was when he saw his Vision. The map of the Euphrates Valley shows the general geographical features of that district with the Tigris, and the river Khabur, a tributary of the Euphrates, on whose banks Ezekiel was stationed at the time. At a distance of 120 miles to the north-east were the ruins of Nineveh which had been destroyed seventeen years previously, and from which, according to some authorities, Ezekiel had borrowed the imagery of his Vision, the cherubim having

* The paper was illustrated by two lantern slides, from the original of the first of which the frontispiece of the present volume is reproduced.

originated, so it has been stated, in the gigantic figures of winged bulls which Ezekiel might quite possibly have seen at Nineveh. Three hundred miles to the south-east was Babylon, the seat of the great power which five years previously had captured Jerusalem from whence Ezekiel, with the other exiles, had been transported to the colony on the banks of the Khabur. Ezekiel was at the time probably thirty years of age, and being a priest he would therefore have had occasion to take his part in the Temple services before the exile.

The Vision took place in the fourth month. According to pre-exilic usage the year began with October, and the fourth month would consequently be January. It seems more probable to suppose that Ezekiel would use this system of reckoning than that he would adopt the Babylonian custom which made the year begin with April, and this probability seems to be borne out by the allusion to "a stormy wind out of the north," a statement which appears to indicate that the season was that of winter.

Coming now to the actual description of the Vision, Ezekiel tells us that he saw "a great cloud, with a fire infolding itself, and a brightness round about it." There were "four living creatures" which "sparkled like the colour of burnished brass." "In the midst of the living creatures was an appearance like burning coals of fire, like the appearance of torches." In close connection with the living creatures were two wheels, "as it were a wheel in the midst of a wheel," and these were so placed that "there was one wheel upon the earth beside the living creatures for each of the four faces thereof." The "work" of these wheels was "like upon the colour of a beryl," while their "rings" or felloes were "high and dreadful." In addition to these, "over the head of the living creature there was the likeness of a firmament, like the colour of the terrible crystal, stretched forth over their heads above," and "above the firmament that was over their heads was the likeness of a throne, as the appearance of a sapphire stone, and there was brightness round about it. As the appearance of the bow that is in the cloud in the day of rain, so was the appearance of the brightness round about."

The main features of the Vision seem to have been six, namely, the "living creatures," the "burning coals of fire," the "wheel in the midst of a wheel," the "firmament," the "brightness," like a rainbow, and the "throne as the appearance of a sapphire." The whole account seems to suggest that Ezekiel is describing something that was actually before him and seen with his eyes. This idea is strengthened by the way

in which the description is introduced, "as I was among the captives by the river Chebar. . . . I looked, and, behold, a stormy wind came out of the north," and, later on, by the expression, "one wheel upon the earth. . . . for each of the four faces thereof," which appears to imply that Ezekiel was actually looking at the thing he describes, and that it was as real a thing as the earth on which he was standing—in fact, that the Vision was in some sense based upon a natural object. If there be any element of truth in the suggestion, such a natural object could only be some kind of celestial phenomenon, and the question arises whether there is any known phenomenon presenting such a complication of effects as that pictured by Ezekiel?

The phenomenon of the Parhelia is rarely seen in this country because of the peculiar climatic conditions necessary for its occurrence. The atmosphere has to be charged with myriads of minute crystals of ice; being very light, these float in the air, and as the sun shines through them their intricate shapes reflect and refract its light, producing a complexity of coloured rings and bands of magnificent proportions and of unsurpassed beauty and symmetry.

Owing to its great extent, and to the fact that the conditions necessary for its appearance are influenced by very slight changes in the atmospheric conditions, the phenomenon is seldom seen in its entirety, and different observers may see different parts of it. I myself had the rare opportunity, some few years ago, of seeing a remarkably complete display of this phenomenon, and will attempt to describe what I then saw with the assistance of a painting executed by a well-known artist from descriptions given him by myself.

Looking west shortly before sunset, the sun appeared as a crimson disc behind grey clouds. It was encircled by two halos of immense proportions, the outer halo being considerably greater than a rainbow at its highest possible elevation. The colouring of these halos was that of a rich amethyst purple, and at the extreme right and left of each were masses of brilliant light tinged with yellow; these are the Parhelia, or mock suns, from which the whole phenomenon derives its name. Bands of light passed through these Parhelia in a horizontal and vertical direction, the former being portions of a circle, seldom seen entire, called the Parhelic Circle, and the latter being parts of great circles whose appearance depends upon the slow oscillating movement of the ice crystals as they sway in the air, the amount of their upward and downward extent varying with the move-

ment of the crystals. Above the inner halo appeared an arc, touching it at its summit, an expanse of white light stretching out on either side.

Above the outer halo appeared another arc brilliantly coloured with the colours of the rainbow. The position occupied by this arc was remarkable; it was not in the same vertical plane as the two halos, but in a horizontal plane, and was part of a circle, which, if complete, would encircle the zenith, the centre being therefore immediately over the head of the observer. When seen in a cloudless winter sky, the deep blue of the zenith appeared as a ball of sapphire encircled by a rainbow.

We may now enquire as to how far the details of this phenomenon are reproduced in the account given by Ezekiel. The four Parhelia are described as "four living creatures," each one having "four wings," which "sparkled like burnished brass." The sun is likened to "burning coals of fire," and its position defined as "in the midst of the living creatures." Ezekiel speaks of the two halos as "a wheel in the midst of a wheel," their colour being that of a "beryl," their proportions graphically portrayed as "high and dreadful," and their position relatively to the Parhelia and to the ground completely and accurately explained by the sentence "there was one wheel upon the earth beside the living creatures for each of the four faces thereof." The arc over the inner halo is correctly described in every particular, first as to its position, "over the head of the living creatures," then as to colour, "like the colour of the terrible crystal," that is, ice, and lastly as to its general appearance, "a firmament," that is, an expanse spread out by beating, "stretched forth over their heads above." The arc over the outer halo is accurately placed "above the firmament," and its appearance like "the appearance that is in the cloud in the day of rain"; this was the "brightness" round about a "throne, as the appearance of a sapphire stone." The dense blue of the zenith, half-encircled by the bow, appeared as a throne of sapphire. The agreement in every detail is so remarkable that one cannot avoid the conclusion that Ezekiel had the Parhelia before him at the time.

Since the appearance of the Parhelia depends upon the presence of ice crystals in the air the question may be asked whether this phenomenon could appear in the Euphrates Valley, and whether the climatic conditions admit of such a possibility? At the time of the vision Ezekiel was two hundred miles north of the southern limit of snowfall in that part of Asia. At

Mosul, which is about the same latitude, severe frosts frequently occur, and the Tigris at Nineveh is sometimes nearly frozen over. The climatic conditions, therefore, are such as to render an occurrence of the Parhelia physically possible. I was anxious, however, to ascertain whether the Parhelia had actually been seen there, and in 1905 I wrote to Dr. Hume Griffith, who was in charge of the Medical Mission at Mosul, asking him whether he had seen the Parhelia, and if not, if he would keep a look out for it, at the same time sending him a full description of the phenomenon. Dr. Griffith replied saying that he had not seen the Parhelia, but that he would watch for it. In the autumn of 1907 he was returning to England on furlough, and after crossing the desert that lies between the Tigris and the Euphrates he had encamped for the night on the banks of the river Khabur. Late that evening, by a remarkable coincidence, he saw a fine display of the Parhelia. In a subsequent letter to me Dr. Griffith described what he saw: "Your previous letter had passed from my mind, and when my wife called me out of our tent to see 'the glorious sky' I had forgotten that our tent was pitched for the night on the banks of the river Khabur. The month was November, about the first week, the evening was cold and inclined to be frosty, the sun was setting, and from it projected spokes of various hues, with an appearance of a wheel within a wheel . . . the huge wing-shaped appearance on each side of the wheel spread far up into the heavens. The whole phenomenon lasted only a few minutes as the sun sank to rest. After watching it and discussing the curious wheel-like appearance I suddenly thought of where we stood, and of your long forgotten letter, and wondered whether this was what you had asked me to look out for."

There can be no doubt that what Dr. Griffith saw was the Parhelia, though in this case the most prominent features of the phenomenon were the two halos and the tangential arcs at the sides of the outer halo which were extended upwards to a great height.

We have therefore evidence that the Parhelia has been seen on the very spot where Ezekiel saw his Vision, and that Ezekiel gives a description agreeing at every point with that of the Parhelia. These facts taken together force upon us the conviction that Ezekiel had the Parhelia before him at the time of his Vision, and that this phenomenon constituted the natural object on which the Vision was based.

In conclusion I would suggest that the Vision of Ezekiel does not lose anything of its spiritual value, that it is not in

any degree less of an inspired message, owing to the fact of its being based upon a natural phenomenon. On the contrary, it gains in impressiveness and significance, and the idea that God has chosen the most magnificent of all natural phenomena to convey to man a knowledge of His Glory and Perfection is in agreement with the truths of Revelation.

496TH ORDINARY GENERAL MEETING.

MONDAY, APRIL 19TH, 1909.

PROFESSOR E. HULL, LL.D., F.R.S. (VICE-PRESIDENT), IN THE
CHAIR.

The Minutes of the previous Meeting were read and confirmed.

The following paper was then read by the author :—

*THE PRESENT POSITION OF CATHOLICS IN
FRANCE.* By ARTHUR GALTON, M.A., Vicar of Edenham,
Bourne, Lincs.

MY paper was announced on your list of subjects as “Modern Christianity in France,” but what I wish to bring before you may be described more accurately, perhaps, as “The Present Position of Catholics in France.” I venture, therefore, to substitute this title for the other, both as a convenience to my hearers and as a guidance to myself, through a tortuous and complicated labyrinth.

The present position of catholics in France can only be understood through a knowledge of their past, and I must begin by explaining some of their old positions, as briefly as I can.

From the fall of the Roman Empire in the west down to 1789, the gallican church was the most influential and one of the most wealthy organisations within the papal communion. It was also the most intensely national and, on the whole, the freest. All patronage worth having was at the disposal of the crown. The royal supremacy was more active and arbitrary than it ever was in England. No papal decrees or definitions had any validity until they had been scrutinised and accepted by the lawyers, ratified by the various parliaments, sanctioned by the king and promulgated by his executive. There was no

quarrel with Rome and no breach in the traditional fabric of catholic unity ; but the monarchy secured most effectually that the pope should exercise no jurisdiction within the realm of France. The prerogatives of the State and the national autonomy of the church were guarded with the most jealous care. By this achievement, French statesmanship, as I venture to think, showed itself more enlightened and unselfish than some of our English politicians in the sixteenth century. At any rate, the church of France was not isolated in Christendom ; its continuity could not be challenged ; and it was the chief barrier, for the whole of Latin Christianity, against papal centralisation and aggression. As long as gallicanism flourished, the triumph of ultramontaniam was impossible. This was a great achievement. It gives us a clue to all that has happened since, and we are not concerned at present with the manifold and internal defects of the old gallican church. Let us rather be grateful to it for this very difficult and important thing which it achieved, by which, as usual, France was a benefactor and a model to all the nations.

In 1789, all serious and educated laymen and the vast majority of parochial clergy, not only accepted, but welcomed the Revolution. They welcomed it as churchmen, because they saw in it an opportunity for securing those ecclesiastical reforms which the better part of the nation, enlightened by the philosophers, had long and earnestly desired. They recognised as well, with their admirable French logic, that the rights of man, as the Revolution enunciated them, are clearly deducible from the New Testament, and that the three words, Liberty, Equality, Fraternity, which sum up the whole spirit of the Revolution, are also a summary of the gospel, so far as we are able to infer the conceptions of the Christ Himself. As, in those days, the church undoubtedly was the nation, and the nation was the church, it cannot be denied that French catholicism accepted the Revolution, and adapted it to its ecclesiastical affairs. In questions of doctrine, the French assemblies were rigorously and even scrupulously conservative ; but in all matters of organisation they initiated reforms which made the church more national, more efficient, more equitable in government and patronage. We cannot enter into the details of the *Constitution Civile du Clergé*, so I will only say two things about it : first, that if ever we should be disestablished or reformed, and if in the process we do not let ourselves be annexed by an ambitious and aggressive clericalism, there is no ecclesiastical constitution which is more worthy of our serious consideration ; and secondly,

if this constitution had had a fair trial, and had been maintained, religion in France and, consequently, in the largest part of Christendom, would have been in a much healthier condition than it is to-day.

The *Constitution Civile*, however, interfered with vested interests. The papacy opposed it on various flimsy pretexts, but really to maintain and extend its own authority, while the French bishops disliked it because it reduced their incomes and prerogatives. The papacy and the episcopate mis-led a king, who, like our own Charles I., was timid, unintelligent and insincere. They frightened a large number of the clergy, and they seduced that mischievous and credulous section of the laity which is always inclined to be more fanatical than the clergy themselves. They utilised and exacerbated the emigrant nobility, intrigued with hostile and reactionary governments, operated with foreign invaders, subordinated patriotism and even the national safety to professional interests; and by all these machinations played on the ignorance and fanaticism of the peasantry in many districts. These tactics led inevitably to reaction and reprisals on the part of the majority, and are chiefly responsible for the worst excesses and crimes of the revolutionary factions. Everybody talks glibly enough about the Reign of Terror. Few Englishmen realise what caused that terror, which was perfectly genuine and only too well founded; and still fewer know anything about the wholesale atrocities committed by the abominable White Terror, *i.e.*, by partisans of the pope, the bishops and the nobles.

In spite of all these violences on both sides the *Constitution Civile* did good work. It prospered, it was extending itself through the nation, and would have satisfied it. Unfortunately, it had an uncompromising enemy in Napoleon. It was far too liberal to suit his designs; and, for his own ends, he effected the concordat of 1801. It was not the first time that a French sovereign and a pope had sacrificed the interests of the gallican church to their own convenience. The result of the concordat was to end gallicanism, by leaving the French church exposed to ultramontane developments and aggressions: this, of course, was not Napoleon's intention, but the inevitable effects of the concordat were foreseen by Talleyrand, and by a few other wise men, who knew what gallicanism had been and who understood the papacy.

For ultramontaniam came in, like a rising flood, with the restoration of Pius VII. in 1814. It was due to three causes: First, to that political reaction which was a natural consequence

of the revolutionary excesses. The despotic sovereigns of Europe formed an Holy Alliance against the liberties of their people and the rights of nations. With this infamous and fatuous policy our various administrations were in sympathy, until our affairs were managed by the more generous, brave, and liberating intellect of Lord Palmerston, who was not only a great Englishman, but a wise, farseeing and beneficent European. Secondly, the growth of ultramontaniam was due to the re-establishment of the Society of Jesus, which is pledged above all things to the papal service; for its motto, *Ad Majorem Dei Gloriam*, always means the greater glory and jurisdiction of the pope. Its theologians in the sixteenth century drew the most logical conclusions from the claims of the mediæval papacy, and its men of action devoted themselves with heroic zeal to making these conclusions practical. The restored Jesuits not only controlled the policy of the Holy See, but they had almost a monopoly of both lay and clerical education. In other words, they leavened the theology and the mentality of the whole papal system. Their efforts culminated with the decree of infallibility in 1870: but the effects of their policy still remain to be proved; for their evolution of Romanism during the nineteenth century is not working out very successfully, so far as one can judge, in the twentieth. Thirdly, the spread of ultramontaniam owes much to those extravagant, sentimental, and fallacious notions of mediævalism which replaced the sturdier common sense of the eighteenth century. A scientific knowledge of the middle ages does not make either for catholicism or for papalism, or for an unqualified admiration of mediævalism itself, that mingled product of ignorance and barbarity; but the romantic movement of the early nineteenth century was not scientific, nor was any single one of its leaders either in France or England, either in history or in theology. It was, rather, ignorant and emotional and silly. It produced our thoroughly illogical English tractarianism, and it was utilised very cleverly by the more logical ultramontanians for their own purposes.

Besides these three causes for the growth of ultramontaniam, the ancient barriers of the gallican church against romanising were destroyed. They fell with the monarchy, and were not restored with it. The old national spirit of the church was broken. A breach was made between the church and the nation, which the reactionary politics and the romanising theology of the French ecclesiastics have widened continuously. Every possible mistake, that could be made, was made by the

clergy and their allies throughout the Restoration, the monarchy of Louis Philippe, the Second Empire, and the Third Republic. Lost causes, forsaken beliefs, unpopular names, impossible loyalties, ridiculous pretenders, and ignoble policies, were clung to with incredible folly, and served by the most reprehensible methods. There is little that is either noble or chivalrous in the story of the French reactionaries. Whenever the clerical party secured any power, they misused it. Their struggle has never been for liberty, but always for privilege and monopoly. Equality before the law, they have described as persecution; for, according to papal theories, the clergy may never be subordinated to the civil power. When they provoke reaction and reprisals, they complain of martyrdom. As Newman said, long ago, "Nothing will ever satisfy the Roman Catholics"; but, as usual, he was only half right. One thing satisfies them, namely supremacy over the civil power, and over every individual human being. This is inherent in ultramontanism. There is no escape from the consequences of ultramontane premisses, either for those who formulate the papal claims, or for those who accept them voluntarily, or for those unfortunates upon whom they can be imposed. Now ultramontanism is not a new thing. It was not invented in 1814, nor launched by the decree of 1870, for the principles of ultramontanism were enunciated clearly by the great mediæval popes, and they were inherent in the claims of the Roman court as far back as Leo I. in the fifth century.

But let us hold clearly to a broad principle, and then we shall understand that conflict which we are witnessing in France, and may have to deal with here; a struggle which may seem complicated to many outside observers, but which is in reality the simplest of all contemporary problems. The papal claims, infallibility, ultramontanism, are incompatible with all that is understood by the French Revolution, using that term in its good sense. They are incompatible with the rights of man; with all that Frenchmen have desired since 1789, and which they are gradually obtaining. They are incompatible with the ideals of modern society, and with the very foundations upon which our existing society rests. I need scarcely add that they are wholly incompatible with that mysterious entity, which we all know by instinct, but which none of us can define or handle: I mean the British Constitution. English institutions and the papal autocracy are absolutely incompatible, the one with the other. They cannot be combined without loss, and ultimately without destruction, to one or both. No compromise whatever

is possible between them: that is a lesson which we may learn from France. It is a lesson which we learned for ourselves, and practised, in the sixteenth century; but there are many signs that we are in danger of unlearning it, through that sentimentalism, the fruit of ease and prosperity, which is one of the gravest dangers in our modern life, not only to the individual, but even more to States, and, as we should not forget, to churches. "A catholic atmosphere," as it is called in our fatuous and ignoble educational squabbles, whether anglican or roman, is absolutely incompatible with English citizenship.

From this little sketch two things, perhaps, will have emerged clearly; the old gallican church was destroyed, both in form and spirit, by Napoleon's concordat. There was no longer a national church of France, in the old meaning of the term. Napoleon organised an ecclesiastical system, which he intended to be a department of State; but his hierarchy, as was proved immediately, was wholly unprotected against papal interference. He enabled a foreign power to become supreme over a large body of Frenchmen. He gave to its representatives official rank and collective wealth, both of which endued it further with political influence; and this hierarchical system easily secured for itself infinite and irresistible powers of expansion. In two directions, this expansion was immediate and systematic. The religious orders were not restored by the concordat. In fact, they were implicitly forbidden; but, even before Napoleon disappeared, they were revived under one pretext or another; and they increased continuously, prolifically, until the danger was tackled resolutely by the legislation of Waldeck-Rousseau and the administration of M. Combes.

The clergy also won back, by slower degrees, the control of education, a victory which they owed chiefly to the religious orders; but, not content with privilege and supremacy and control, they were always trying to proscribe every other system which was devised by the State and desired by those who objected to the tone, the methods, and the results of clerical teaching.

Now few things are so open to dispute as statistics. Even facts are hardly more controversial; and the numbers of the French catholics are not an easy question to decide. I will, however, take a practical test, which I think proves a good deal, and impales those who dispute it on one or other horn of a dilemma. Since the earliest parliaments of the Restoration, under Louis XVIII., there has never been a clerical majority in France. There has never been even a respectable minority. The

papacy and the clergy have been able to threaten governments, to disturb the civil order, to impede public policy, and they have done this by influencing illiterate or semi-educated voters; but they have never been able to legislate directly, or to assume the responsibilities and power of office. Every election shows a decrease in the clerical and reactionary parties, not only in the Chambers, but in the departmental, the municipal, and the communal councils; a decrease, not merely in those who are elected, but a more significant shrinkage in those who vote. The reactionary parties are disappearing fast, even in those backward districts which used to be the strongholds of clericalism. This process has gone on steadily for the greater part of a century, and during the last forty years with an ever-growing rapidity. At present, the various reactionary parties are a negligible quantity in the legislature, and they seem tending to extinction in the electorate. France may thus be contrasted with Belgium, let us say, where liberals and clericals are almost equally balanced, and both sides are able to gain majorities, and form administrations. Though it should be added that this result is only obtained in Belgium, so far as the clericals are concerned, by a manipulation of the franchise which is not likely to be permanent.

Now the conclusions which I draw, with regard to France, are either that the roman catholics are a small and ever-diminishing fraction of the people; or that their leaders have not sense enough to organise the forces which they might control; or, granting the existence of such forces, then the bulk of the roman catholics are either apathetic, or they are out of sympathy with the policy and aims of their hierarchy, and above all of Rome. I think there is something to be allowed for in these two last reasons; but I hold that my first conclusion is entirely true, and that it explains the whole situation. Out of the 38,000,000 or so, of the French population in France, only a dwindling minority is even nominally catholic, and of that minority again only a still smaller section are practising and contributing to their religion. The actual numbers are not easily computed. Spain, with a population of 16,000,000, is given, by certain ultramontane authorities, only 4,000,000 of practising catholics, one quarter of the population. This is thought by many observers to be too large. In any case, the proportion in France is certainly much lower than in Spain; even when the figures are increased by those multitudes who, for domestic or social reasons, are christened, married, and buried by the clergy, but who have no other dealings with the church.

Now it should be self-evident that a liberal State and a reactionary church cannot live in peace together. When it is realised, further, that the Roman Court is chiefly a political and financial organisation, administered by diplomatic methods and principles, and only masquerading as a religious or theological institution, it is easy to see that there will be perpetual friction between church and State. In France, the battles caused by this friction have always turned ultimately on education: for obvious reasons. The State has said, with undeniable justice, universal suffrage postulates an educated electorate; therefore education must be compulsory. If it be compulsory, it must also, in justice, be gratuitous; and, in a country of various theologies and conflicting sects, it must also be unsectarian and neutral with regard to all such controversies. The logic of all this reasoning is unassailable, and is of universal application. The church, on the other hand, not only claims a monopoly in even the secular education of its subjects, but it challenges the claim of the State to educate at all. In practice, it has never had what we should call a right of entry without abusing it, and misusing education for political purposes. The clergy, and above all the religious orders, have inculcated principles which are absolutely opposed to the existing institutions, to the social and political ideals, of modern France. Moreover, they have seen in education a means of biassing the electorate, of influencing voters, and so of undermining the institutions of their country. Hence, the whole conflict between church and State, under the Third Republic; and, especially, the defensive legislation of the Republicans against the teaching orders.

Usually, the extreme clericals have combated the Republic directly and openly, either as agents or as dupes of the monarchical and reactionary parties. This was the policy of Pius IX. Leo XIII., with greater wisdom and astuteness, since he was a statesman of very unusual capacity, advised rallying to the Republic: by which he meant an ostensible peace, a quiet, stealthy acceptance and utilising of the educational and legislative machinery, so that the electorate might be leavened, the public service, the learned professions, and by degrees the Chambers, packed with clerical adherents, and thus legislation and administration would pass into ecclesiastical control; and then in due time the Republic would have been either mended, in a papal sense, or ended. This was an astute and a very able policy. It very nearly succeeded, I don't say in victory, but in producing a revolution. It was helped enormously by the follies and factions of the Republicans themselves. It was

checkmated, however, partly by the obstinacy and fanaticism of the extreme royalists and clericals, who opposed the methods and policy of Leo; partly by the imprudence and over-haste of his supporters, especially the monks. These flung all caution to the winds, threw themselves into electoral contests, utilised malodorous pretenders like Boulanger, and proclaimed their policy openly by their abominable press, their shameless methods, and their innumerable organisations. The Republic was in the gravest danger from about 1886 onwards; and its eyes were only opened effectually by the crimes and scandals of the Dreyfus case.

To meet these dangers the Republicans rallied and formed a united party, the *bloc*, under Waldeck-Rousseau, which faced the whole situation resolutely. It began by dealing with the unauthorised religious orders and their property, and then it passed on to education. Leo XIII. behaved, as always, like a statesman. He saw the shipwreck of his policy without any idle recriminations. He allowed no disturbance over the anti-monastic legislation; and he resolved to make the best terms possible out of existing circumstances. As long as he lived, separation was not a practical question; but, thanks to Pius X. and his advisers, the whole aspect of things was changed in the autumn of 1903. Cardinal Sarto was a nonentity, an average Italian parochial ecclesiastic; a reader of nothing but his breviary, and not a scholar of that; trained only in and by his seminary, and wholly undeveloped since; absolutely unversed in great affairs; speaking no language but his own, and that in a provincial dialect. He owed his election to the veto, ostensibly of Austria, but more probably of Germany. By this veto, Cardinal Rampolla, a great Secretary of State, the confidant of Leo XIII., and a warm friend of France, was excluded, though his election was absolutely certain, and was on the point of being declared. The new Pope chose as his Secretary of State a young man, half Irish, half Spaniard, and a British subject, but not a francophil, and evidently a blind tool of the Jesuits. Thus the diplomatic influence of Germany and of the Society of Jesus has been supreme in the Vatican since 1903, with the results which we have witnessed. It is a very dangerous and sinister alliance: of militarism and Jesuitism, of autocracy and theocracy. Fortunately, it has not been successful so far; but circumstances might easily arise in which this combination would see a chance of realising their several ambitions through war, especially after the late encouraging experiences of Austria: to which we have been able to

oppose nothing except sonorous and self-righteous platitudes, which have naturally not counted in the scales of international justice against the weight of the Prussian sword.

But let us return to France. Everything was done by Pius X. and his director Merry del Val, to exasperate the French government. Bishops were summoned to Rome, and deposed without consulting it. Both the letter and spirit of the concordat were ignored. French national feeling was wounded in the most galling way over the journey of President Loubet to Italy; and the insult was aggravated by the garbled despatches in which the matter was discussed with other powers. The Curia thought the Republic was afraid to deal with separation, but it was never more fundamentally mistaken. The policy was carried through calmly and steadily, without causing even a ripple of serious disturbance on the surface of public order, in spite of desperate efforts by the Vatican to inflame the population and to influence the Chambers. We must acknowledge that this satisfactory result was due very largely to the wise educational policy of Jules Ferry and the earlier statesmen of the Third Republic. Pius IX. could coerce and terrify the administration of Napoleon III., by playing through his clergy upon an uneducated electorate. Pius X. and his agents have proved themselves unable to ruffle public opinion in any single part of France.

The project of separation itself was just and moderate. There was no church property in France. It was all resumed by the nation, in 1789, with the acquiescence of the clergy, and the whole matter was ratified by Pius VII. in 1802. It was allowed by all French jurists, and admitted by the ecclesiastics, that no corporation, and therefore not the church, can have any claims against the State, which must be supreme in all questions of property. It was admitted, also, that the payments to the clergy under the concordat were in no sense an equivalent for the old ecclesiastical revenues. The roman catholic clergy, then, and the other ministers recognised by the State, were paid annual salaries. They were civil servants, as all State paid officials must be. There was thus no question of disendowment, properly speaking; no vexed and complicated problem of dealing with, or readjusting, vast quantities of property. Disestablishment in France meant literally a separation, officially, between church and State. It was thus in its financial aspects a very simple measure indeed, and not as it would be with us a very complicated matter. The budget of public worship had grown outrageously between 1814 and

1900. As the relative proportion of catholics declined, so the demands of the clergy and the contributions of the State increased. It is manifest, that an organisation and a budget which were devised when the nation and the church were practically identical, were no longer equitable when the church had dwindled into a fraction of the people. For that reason alone, a readjustment of the concordat was demanded. But there were the other and more imperious reasons, to which I have alluded, viz., that the nation and the church hold incompatible ideals, that their principles and methods are irreconcilable, and that through the growth of ultramontaniam the French catholics, instead of being national in spirit, had succumbed wholly to the influence and control of a foreign power. The church in France was not only a rival system within the State, but it was a foreign, a hostile, and an aggressive organisation within the State; claiming and exercising a supreme control over property and persons, though deriving its influence to a very large extent from the revenues and position which it received from the government. All this, as French Liberals thought, quite reasonably, was anomalous, intolerable, and even suicidal. A nation certainly has the right to say whether it will or will not have official relations with any ecclesiastical system. It also has the right either to end or to modify existing relations.

The financial scheme of separation was not only just, but generous. All personal and existing interests were respected. The change was to be gradual. Salaries were to be paid in a diminishing scale for four, and in some cases for eight, years after the passing of the law. In some cases age, and in others length of service, entitled ecclesiastics to a life pension. Certain public chaplaincies continue to be paid by the State. But with regard to all parochial ministrations, the legislature decided that the majority of the nation no longer desired them; that the existing system was a sham, and was inequitable; and that all such services should be provided and paid for by those who wanted them.

With regard to fabrics, it must be remembered again that there was no ecclesiastical property in France. This was made plain by the concordat, which was only ratified by the State on condition that this was recognised by the clergy. The churches themselves were State property, so were the bishops' houses. The presbyteries were either national, or municipal, or communal property. In all cases they were public property, even under the concordat. There was, therefore, no confiscation.

and no application of a new principle by the separation law. In all cases, the use of the churches was made over to the existing occupants, subject to their proper usage and repair. Cathedrals and all important buildings were considered, as they have long been, historical monuments, for which the State holds itself responsible. In this matter, the separated church of France is treated more wisely and generously than are the cathedral chapters of our own established church. Legal associations were to be formed to deal with all questions of repairs and finance. Official inventories were to be made of all moveable property, at the desire of the catholic deputies, and solely in the interests of the catholics themselves, so that valuable and artistic objects might not be alienated or stolen. These associations were absolutely under the control of the bishops; and more than this, only those ecclesiastics were to be recognised as lawful occupiers of churches who were approved by the bishops and the Vatican. In all this, the State conceded everything the papacy can have desired or expected, and certainly more than it should have given. The majority of local catholics, and not the Pope, should have decided all such questions, and the State should have accepted their decision. At any rate, there was no attack by the State on ecclesiastical discipline, or on the hierarchical order, or on the papal authority. They were all safeguarded, and even guaranteed by the State, which not only did nothing to encourage schism, but exceeded its functions by devising an organisation that discouraged it.

The French bishops, by large majorities, were willing to accept all this legislation; but they were over-ruled by the Vatican, which played the desperate game of disapproving every law, and rejecting every financial scheme. Its reasons are obvious. It hoped the government would retaliate, and that the disturbing cry of persecution might be raised. It wanted to see churches closed, services forbidden, and ecclesiastical life suspended. The government was too alert and wise to fall into this trap, and also too faithful to its liberal principles. Not a church nor a service was interfered with, and the ritual business of France has gone on uninterruptedly, as usual. Salaries and pensions have been paid as the law intended, though the papal repudiation of the law should, strictly, have vitiated the whole scheme and relieved the State from any further responsibility. There have been a few disputes over the use and rents of presbyteries, but in all cases the courts have decided impartially between ecclesiastics and the local

authorities. Public opinion has not been moved, and apparently does not seem interested by the situation which the Pope created; but the bishops have been deprived of an immense deal of property, on which they were relying for diocesan administration, and the lower clergy have suffered still more grievously. Rome also has suffered indirectly, and in two ways. The French church can hardly pay its way or meet its own diocesan and parochial obligations, therefore it has less and less to spare for external purposes. For this reason the Peter's Pence from France must have shrunk ominously, and is probably still shrinking; and the foreign missions, to which France contributed so lavishly in money, so devotedly in men, and which are so important an item in the papal propaganda, must be declining very much as Peter's Pence is.

It may now be asked why the papacy embarked on this reckless and apparently foolish policy: first, it miscalculated the effects of separation, just as it had miscalculated the possibility of it. It thought the country would be roused, and it wasn't. Evidently, the Vatican did not realise the position of catholicism in France. Secondly, it not only disliked but feared the precedent, that France should be able to carry through so fundamental a change without even consulting the Holy See. In the opinion of the French government, separation was a purely national question, in which foreigners had no concern. The Vatican urged that it was chiefly a papal question, which could not be settled without the pope. The French view has proved more correct, and the difficulty did not exist in fact. The dangerous precedent has been created, and has shown that it is workable. It may, therefore, be followed with impunity by other governments. That is why separation in France is the most grievous blow to the papal authority which has happened since the sixteenth century. In view of its threatened authority, which it has not saved after all, the Vatican cared little about the interests of the French clergy, and treated their sufferings with its usual cynical indifference. Let us add, if we would be just, that the French clergy have endured manfully for what they were told was right. They have been heroically loyal to their conceptions of authority and order; but it has been a desperate and a very dubious policy. It must have disillusioned a great many of the clergy, and it is bound to have more illuminating effects on the coming generation of ecclesiastics.

There certainly has been one tragic disillusion for the French catholics. Many of the more enlightened were favourable to

separation. They thought it would clear the air, end many obvious unrealities, and stimulate zeal by forcing the laity to accept their responsibilities. Above all, they hoped to realise the ideal of a free church in a free or at any rate a neutral State. Certainly the State has become neutral. Subject only to its ordinary laws of police and of corporate finance, the Roman catholics are free. Indeed, the ordinary laws of public meeting have been relaxed in their favour. But they are less free than they were before. Under the concordat, if there were some State control, which was more nominal than real, there was also some theory of protection and guarantee. This has all been swept away; and what is called the French church has become merely an outlying department of the Vatican administration. The choice of bishops was not given back to the people, or even to the clergy. It is solely in the hands of Rome. The bishops are now, both in fact and theory, mere papal delegates, made and unmade at pleasure, with no security of tenure, no powers of initiative, no genuine responsibility, and an ever dwindling power of administration. The parochial clergy, in like manner, are absolutely dependent on their bishops. The canon law, and the possession of corporate endowments, especially in land, made the old French clergy both free and strong, as against Rome, while the royal supremacy was an additional protection. All this was modified or destroyed by the Revolution and the concordat. Though the *Constitution Civile* would have secured the freedom of the church, against both the papacy and the politicians, the concordat was no protection against either. It was illogical in its conception, blundering in its methods, and mischievous in its results, from the beginning; and its century of life only made these defects more glaring. But the present state of French romanism is far worse, and can only end in moral and intellectual disaster. Every institution must bear the defects of its principles and qualities. Of all institutions which human beings have devised for their moral, intellectual, political, social, and material undoing, a theocracy is the worst. It is the most prolific in itself of mischief; the most obstinate in ill-doing; the most opposed to progress, and to intellectual or civic freedom; and it is the most difficult to over-turn. To reform a theocracy is, indeed, impossible; for it is a contradiction in terms. Whenever deities have been established and endowed, they have always shown themselves incorrigible.

Now the Vatican is a theocracy; and it has added to this original disease the next most pernicious of administrative

abuses, viz., a bureaucracy. Through the steady growth of Vaticanism since 1814, through modern methods of communication, through the decline of lay influence and of public control, this ecclesiastical bureaucracy has become more powerful and centralised. It has encroached upon all the churches, and absorbed all the jurisdiction which used to be inherent in the episcopate. The religious orders, too, are now centralised, and every conventual organisation has a superior in Rome. The bureaucracy of the Vatican is, moreover, not only centralised but ubiquitous, and is in immediate contact with the whole of its international organisation. The mediæval popes may seem terrifying, as we idealise them; but a modern pope, almost deified in his shrine, relieved from political anxieties and fetters, speaking through a myriad newspapers, communicating with an universal hierarchy through telephones and wireless telegraphy, and commanding the abject obedience of those with whom he deigns to communicate, would be far more dangerous if he could rely, as his predecessors did, on the secular arm and on popular support. But these two essential elements of power are no longer with the papacy, and popular support is receding from it more and more. Besides, Vaticanism is tending inevitably to destroy such elements of strength as it may still command. Its principles compel it to sterilise and emasculate its own subjects. Men cannot be governed like slaves and children with impunity. The Society of Jesus would have proved irresistible long ago, in a loose and divided world, if the very process which moulds a Jesuit did not weaken him intellectually and morally by tampering with the qualities on which his individuality and strength depend. The Society has had the pick of roman catholic material ever since it was founded, it has never degenerated like the other orders, its effort has been unceasing and its zeal heroic, and yet it has never produced a single genius, or a man of the first rank in any line. Its general standard is wonderfully high, but everything is sacrificed to that standard; and thus, the Society, in spite of all its talent and zeal, has been little more than a vast machine for the production of mediocrity. Failure is writ large over its history, much larger than success. A similar process is now at work throughout the papal hierarchy and the priesthood: and in both, it will be far more destructive than in the case of a religious order, which starts with picked men; for the average parochial minister is not a picked man. He is, perhaps, below the general average of laymen; and the present centralised methods of ruling the Church will keep him below that

average, both in intelligence and virility. The papacy is tending inevitably to destroy roman catholicism. That is why separation is not dangerous to the State in France, as many liberals imagined. It would have been exceedingly dangerous if the papacy had its old influence; if it could coerce governments and manipulate voters. But the pontificate of Pius X. has revealed that it cannot. And so long as education is diffused and efficient, the papacy and the clergy will not regain those powers. On one side, we have an educated and a progressive democracy; on the other, an over-centralised, and therefore a weakened, hierarchy, an under-educated parochial clergy, and a horde of quite uneducated and obscurantist religious orders. These are the elements with which France has to deal. As long as these qualities on both sides are maintained, or still more as they are developed, the breach between the church and the nation must grow wider. After all, in spite of many superficial appearances, the papal church even at present is not a very solid building. It has a pretentious façade, with nothing much behind it. It has an imposing hierarchy, but not much popular support; while the hierarchy itself is crushed by the papacy, and undermined by the religious orders; and the priesthood is becoming always more negligible intellectually. No system can endure permanently under these conditions. It may long be powerful for mischief, since it is built on traditional ignorance, and trades on atavistic fears; but the papacy cannot dominate a world which it is no longer capable of leading. All the newer forces which are influencing mankind are against it; and no religious organisation can subsist in the face of a truth and a morality which are higher than its own.

Even within the church, these forces, which seemed dormant for so long, are now becoming visible and audible. The papal church may have appeared stagnant since 1870, but it was really germinating with new life. This life is described by the insufficient and misleading term of modernism. It is a thing easy to understand, but much less easy to define, as even the Pope has found. Modernism is not, as the Pope has asserted, a system of philosophy or a school of thought, with fixed aims and exclusive rules; it means being in touch and sympathy with the intellectual world of to-day, with this age in which we live. It implies knowing the best that has been thought and said in the great world of the past; handling and judging this knowledge by our present scientific methods, and applying it to the highest purposes. Some modernists are philosophers, some are theologians, some philologists, some anthropologists

and students of comparative religion; others are biblical scholars and orientalists; others are hellenists, archæologists, antiquaries, historians; many are philanthropists and explorers of social questions. Most of them have come to see that the papal claims are dubious, or worse; that episcopacy is not what it represented itself to be through so many credulous centuries; that ecclesiastical organisation and theology are both subject to development; that the present state of the papal church is practically unendurable and theoretically indefensible. In these conclusions, the modernists should have the sympathy of all educated people. In trying to reform the church, they are only doing what anglicans took upon themselves to do in the sixteenth century; and the modernists have come now to many of the conclusions which were reached by our own reformers then. Modernism is dissolving the papal claims and the mediæval theology just as the new learning dissolved them in the sixteenth century, only with more certitude and finality.

Now the Vatican, for its own obvious purposes, has tried to identify modernism exclusively with biblical criticism, in order to divert protestant sympathy from the modernists, and to draw the attention of the British public from its own abominable methods of dealing with them. For the papacy still works by violence, in its traditional ways. It uses the Index for writings, and the Inquisition for writers. Behind both is a system of spying and of delation. Within both are secret processes, long since condemned and repudiated by all civilised governments: there are trials in which the accused are not heard, and do not even know their accusation; the accusers are not confronted with their victims, and witnesses are not examined openly, and judgments are given from which there is no appeal. Beyond these injustices, are excommunication, the boycott, professional ruin, and every species of social persecution or domestic pressure; all aggravated a thousand-fold by the lies, calumnies, and outrages of the clerical press, the vilest instrument of tyranny and spite and slander and falsehood and corruption and blackmail now existing in the world. It is traditional that the papacy should use these methods; but it is lamentable that English people should be duped by them, and their want of sympathy with those who suffer is culpable. For there is no royal road to learning, and there is no autocratic or despotic way to truth. It has to be reached by labour and hypothesis and experiment, and by much pondering, and often only through many errors and mistakes. These are inevitable in all human research, and they do not matter if the intention be

honest. Truth and scholarship will always find their level if they be unimpeded. Error will inevitably be detected and exposed, when there is freedom of research and of speech. These have been, hitherto, our English methods ; and we should have no sympathy with those who violate them systematically, flagrantly, cynically, especially by misusing the press to deceive the people, and to undermine those liberties of which it should be a strenuous guardian.

Now it may be asked, What is the present position of modernism, and what are its prospects ?

First, there has been no general movement ; but it must not be supposed that modernism is dead. It has not been killed by Pius X. I have explained that the State remained neutral, and gave no encouragement to ecclesiastical secessions. Indeed, by its financial arrangements, it went beyond a strict neutrality, and made any liberating process difficult. And the leading modernists do not want to move. Some of them have, indeed, and against their wishes, been moved out, but not one of them has been an aggressor. They do not wish to establish new organisations, adding one or more to the too numerous Christian factions. They also recognise the difficulty, or even the impossibility, of organising new churches, on theological and ecclesiastical bases, after the manner of the sixteenth century. The day for such enterprises and institutions is manifestly over. What the modernists aim at and hope for is to leaven the existing organisation ; preserving, if they can, its international character, and its priceless heritage of unity and long tradition. They do not see why an organisation which might be utilised for good, which for a long time will certainly be capable of mischief, should be surrendered without a blow to obscurantists, and fanatics, and autocrats. Only the future will prove whether these hopes can be fulfilled.

In France, then, on the surface, the modernists are vanquished, silenced, excommunicated, solitary ; but, below the surface, modernism is fermenting and spreading. It cannot be excluded, even from the schools and seminaries, unless catholics can be debarred from education, and isolated from social intercourse. The two main difficulties of the French bishops at present are the want of men, and the want of money. Men are wanting, partly because there are not funds enough to educate them ; but also because the ecclesiastical career is unpromising financially, and even more unpromising intellectually. Both in quality and in quantity, the supply of priests will diminish under the existing conditions. The church will die of

intellectual and moral atrophy if ultramontanism prevail. The papacy will inevitably be transformed if modernism prevail; and nothing short of a catastrophe to civilisation can check it.

In Italy, modernism is more widely spread among the clergy than in France. It is both more practical and more intense; as it is allied closely with a great deal of socialistic and revolutionary enthusiasm. The policy of the reigning Pope has led to more anti-clericalism than Italy has experienced since Arnold of Brescia. The growth of the religious orders, since 1870, has been steady, and in Rome itself has become very serious. The governing classes minimise the friction; but the feeling of the urban populations is strong. There might conceivably be a working alliance between modernists and socialists which would possibly overthrow the Curia, and perhaps even eliminate the monarchy. At any rate, there is a significant counter-alliance at present between the Italian ministry and the supporters of the Vatican.

In Germany, the modernist movement has only been kept under with difficulty, through the sympathetic understanding between the papacy and the Prussian bureaucracy. The centre party has no longer the full confidence of the catholic populations. There was much discontent in Germany about the manner in which modernism was condemned by Pius X. The matter of his Encyclicals filled intelligent Germans with contempt or despair; and the methods advocated by him for dealing with the modernists revolted Germanic notions of justice and fair play. Several German professors have been threatened by the Vatican, and if they had been French they would certainly have been condemned; but the papacy hesitated to offend the government, and the government feared to irritate popular feeling by sacrificing German professors to the rancour of Italian ecclesiastics. Between German science and ecclesiastical obscurantism there can be no permanent alliance; and the existing calm in Germany is probably the calm which precedes a storm. It will be for the good of the world if that storm ends the alliance between the Vatican and Berlin, and helps to overthrow the autocracy of both.

The example of France will not be lost, we may be sure, on the other Latin countries, steeped as their clergies are in corruption and stagnation.

In Australia and in the United States, modern ideals and British institutions have been gradually transforming catholicism, even among the Irish settlers. In Canada, these influences have made the catholics very different from their reactionary

kinsmen in France itself. Between Americanism and Vaticanism there can be no lasting agreement. They can never coalesce. There have already been collisions between them, and their divergencies must grow. One principle must yield to the other; and it is not likely that the younger and more vigorous element will succumb. The more fit of the two will assuredly survive.

To the shame and the danger of English romanism, England has practically no modernists; for there is no country in which the clergy are more abjectly in the power of their bishops, or where the bishops are more impeded by the religious orders. Both these conditions are favourable to that *espionage* which is recommended by Pius X., and which is comparatively easy in a small and exclusive sect, given over to the narrowest parochialism, with all its attendant and petty gossip. There can be no deliverance for the anglo-roman clergy until there is an educated lay opinion, capable of supporting them against papal and episcopal usurpations. And the education of the laity will be very slow, as long as they are deluded by a muzzled press, which is wholly under ecclesiastical control.

But Ireland alone among the nations is the hopeless and helpless victim of a dominating clergy, which terrorises the peasantry, devours wealth, and diminishes the population. It is enabled to do all this chiefly by the connivance and the fatuous encouragement of the English administration. For this lamentable state of things, both our parties are equally responsible and culpable. The nationalistic members, even the Redmondites, have sunk into being tools and allies of the clergy. Whatever else Home Rule might do, it would probably end Rome Rule; for it would certainly produce an active and a militant anti-clericalism, of which all the elements are now in solution, and are only waiting to be precipitated. Short of this, the only way of salvation for Ireland is through a reformed and rigorous primary education, freed entirely from ecclesiastical influences. Thirty years of this, working steadily, influencing three generations, would lay the foundation of a regenerated, a prosperous, and a contented Ireland. No other remedies will have much effect until this remedy has been applied; though every other reform would accompany and follow education. Primary education is the key of the Irish problem, as it has always been of the whole papal question; and if Irish education were dealt with properly, the other so-called problems would either vanish, or solve themselves as they do among all civilised people. But the way not to solve Irish problems is to leave

primary education unreformed, in the hands of the clergy; and to endow sectarian or theological colleges, out of public money, by liberal votes, under the pretence of establishing national universities. It is recognised in all roman catholic countries that a clerical college is not a catholic university, but English protestants are incapable of seeing the distinction, especially if they are political dissenters. As long as these and similar follies are committed, the last state of this unhappy country will be worse than any that has gone before.

Ireland may show us that it is not the corruption, but the perfection, of the papal system which is ruinous to a country. History shows us that the record of the papacy is a sufficient refutation of the papal claims. History asks in vain what good the papacy has done, either to churches or to nations. And modernism is answering these questions, and stating these problems, more authoritatively than they have been dealt with before. Both the name and the spirit, like so many other good things, are due to France; which is not only the most intellectual, but, on the whole, the most religious, country in the world.

DISCUSSION.

The paper having been read, the CHAIRMAN said:—The thanks of the meeting were due to Mr. Galton for a clear and able historical document. Terrible indeed was the condition of religion in France. In many other places they might see the decadence of Romanism leading to atheism, of which the reader of the paper had given such striking confirmation. In France the degradation of the Church through Rome had given rise to the belief among many that Christianity was false. Some great revival was needed, and he trusted that many might be led, perhaps through Modernism, to Protestantism. As an Irishman he could not help applying much that had been said to his own country.

Rev. CHANCELLOR LIAS said that as one of the oldest members of Council he had great pleasure in rising to move a vote of thanks to his old friend Mr. Galton for his able and scholarly paper. Mr. Galton's work on French ecclesiastical affairs marked him out as one

specially fitted to deal with the subject. For his own part, he had only a superficial acquaintance with the subject, gained by personal intercourse with some of the French priests, more than a thousand in number, who have left the Church of Rome during the last fifteen years. He had also studied carefully their organs in the press. They might, presumably, regard the Revolution of 1789 as the moment when the tide of public indignation arose which had now submerged Papal domination in France. He had to thank Mr. Galton's volume for a better comprehension of the true character of the settlement of affairs ecclesiastical attempted at the Revolution. In England they had been too ready to accept the description of the measures then taken to reform ecclesiastical affairs from the one-sided utterance of Ultramontane writers. Mr. Galton had shown that the *Constitutions Civiles* were really a statesmanlike attempt to deal with the situation, though they survived only a short time, being replaced before many years by the famous *Concordat* of Napoleon. That was an attempt to make the Emperor the absolute master of the situation. The old franchises of priests and bishops were swept away; the priests were at the mercy of his bishop, the bishop at the mercy of the Pope, and the Pope a prisoner in the hands of Napoleon. The situation thus created was beautifully simple. Only Napoleon forgot that institutions are usually longer lived than individuals. The Papal authority had lasted somewhere about a thousand years, and might have been expected to live another thousand. Napoleon, on the most favourable computation, could hardly expect to live so long. The return of the monarchy placed the Pope once more at the head of affairs, instead of the sovereign. The restoration of the Empire left things as they were, and it was long before the Third Republic, surrounded by difficulties, attempted to grapple with the Church. The conflict was precipitated by the famous Dreyfus case, which showed that the clergy were in league with the army to destroy the Republic. A great deal of sentiment has been wasted on the supposed oppression of harmless and holy men and women by the impiety rampant in France. But as a matter of fact the Church had been treated, as Mr. Galton showed, with the greatest consideration. The conflict would never have arisen had not the Church intrigued to overthrow the Government, and the Orders might have remained in France had they submitted to the regulations laid down for their observance

by the State. Many of these Orders were amassing riches by undertaking trade and manufactures, and it was felt that the money thus obtained was being used to overthrow the constitution of the country, and if the atheism rampant in France was condemned, it was only fair to ask whether the Church, which for more than ten centuries had uncontrolled power over the religious training of the people, must not bear her full share of the blame for the baneful results of her teaching.

The present religious situation was certainly a deplorable one. The churches were for the most part vested still in the hands of the bishops. The attempt to form *Associations Cultuelles* independent of the Pope and to carry on worship in the churches apart from his authority, had been resisted by the State, and in some cases the *gens d'armes* had been called in to prevent the churches being used by any religious body but the one in whose hands the law still vested them. The great majority of the people of the land refused to worship at the accustomed altars, and at present no religious movement existed which was capable of winning them over to a purer form of Christianity. The members of the Institute were much indebted to Mr. Galton for the information he had given them of the actual state of affairs. It was much to be hoped that what he had said might serve to correct the numerous and gross misconceptions which were so widely spread, and might induce them to take a deeper and more generous interest in the religious perplexities into which a great nation had been plunged by the caricature of Christianity which for centuries had been taught to them instead of the genuine doctrine of Christ.

Rev. A. IRVING, D.Sc., said that, as no one else seemed inclined to speak, he would like to have the privilege of seconding the vote of thanks to the author for his valuable, trenchant, and most illuminating paper. From his perusal of Mr. Galton's book he had expected much, and his expectations had been more than realised. Many of the points discussed had received very able treatment in the columns of the *Guardian* for some years past by the Roman Catholic Correspondent of that journal, who writes under the *nom de plume*, "Cis alpine." From such sources mainly the speaker had been able to obtain pretty clear ideas of what has passed behind the scenes in recent years in the policy of the Roman Curia, more especially in its relations with the French Government and the

French Episcopate. He had thus come to regard the present *impasse* of ecclesiastical affairs in France as a drawn battle between Ultramontanism and the great principle of National Churches; and, as a staunch Anglican Churchman, he would fain still hope that, in the working of Divine Providence, a way would be found for the great historic Gallican Church to again raise its head and resume its ancient "Gallican Liberties," to the humiliation of the Roman See with its monstrous pretensions to lord it over the other churches of Christendom.

Dr. Irving went on to say that he had had this matter forced upon his serious attention from the way in which, by perversion of history, the "Italian Mission" in this country had been pushing its way in his own neighbourhood, through an outlying settlement in Bishop's Stortford in connexion with St. Edmund's College at Ware, the modern Douai. It was a gratification to him to find that the position which he had taken up in controversy with the Romanists in the local paper for several years past—and more especially at the time of cruel, crushing treatment which the French Episcopate had to endure from Pius X. and the Curia in August, 1907—was fully supported by what Mr. Galton had put before us in his most able paper.

In conclusion he would like to ask the author of the paper if it was not a fact that the ideas of Pascal and the Port Royalists were becoming daily a greater intellectual force in the minds of thoughtful religious Frenchmen, and if he did not join in the hope that through the growth of those ideas, strengthened by the recent translation of the Bible from the original tongues into French, the religious life of the French nation might emerge from the present chaos through the evolution of an order of things on a broad and tolerant basis, such as we are familiar with in this country.

Mr. J. T. MATTHEWS and Mr. H. S. WILLIAMS also spoke, after which the CHAIRMAN put the vote of thanks, which was carried by acclamation.

Mr. GALTON replied briefly and the meeting terminated.

497TH ORDINARY GENERAL MEETING.

MONDAY, MAY 3RD, 1909.

PROFESSOR E. HULL, LL.D., F.R.S. (VICE-PRESIDENT),
IN THE CHAIR.

The Minutes of the previous Meeting were read and confirmed, and the following candidates were elected Associates :—

Rev. H. J. R. Marston, Belgrave Chapel, London.
Rev. J. H. Skrine, Oxford.

The following paper was then read by the author :—

THE DATE OF THE NATIVITY WAS 8 B.C.

BY LIEUT.-COLONEL G. MACKINLAY, LATE R.A.

IT is well to consider the practical usefulness of our subject, because the ready objection starts up, Dates are dry things, what possible difference can it make whether we know the exact date of the Nativity or not ?

At the beginning of the sixth century it was the custom among the peoples of the old Roman Empire to date events from the time of the persecuting tyrant Diocletian, but in A.D. 532 a Christian Abbot named Dionysius Exiguus* suggested that it would be far better that the Nativity of Christ (as nearly as could then be found) should be taken as the epoch from which to count. His suggestion was agreed to and adopted by all the Christian nations of the world from that time to the present. It surely must be a matter of interest to all who date letters to know whether this starting point of modern time is correct or not.

But there are far more important reasons which appeal to the lover of Scripture, for if this date is found to be the true one, the speculations of the visionaries who assert that the Gospel narratives are mere myths must be overthrown, and the

* *A New Analysis of Chronology*, 1830, vol. i, p. 83, Rev. W. Hales, D.D.

consistency and truthfulness of the Scripture record will be demonstrated.

But some may say—Is it not hopeless to expect to find the exact date? Did not Scaliger* write long ago, “*Diem vero definire unius Dei est, non hominis*”—to determine the true day of Christ’s Birth belongs to God alone, not man. Are not the best scholars still undecided about it? And is not the evidence somewhat contradictory? Have we not heard in some sermons that this date has not been revealed to us, possibly for some wise purpose. Therefore, may it not be unprofitable, vain, and even wrong to attempt to discover it?

To this it is replied, because Scaliger and others did not know the exact date of the Nativity, that is no reason why we should not find out if we can. We are nowhere told in the Scripture that the date of Christ’s Birth is hidden. On the contrary, two direct historical statements are given us in the Gospel of St. Luke, which enable us to find not only the year, but also the season of the year, and several indirect statements in the Bible also point to the same conclusion. There is also good historical evidence apart from the Scriptures, witnessing to the same result.

It is true that in the past there were difficulties in determining this date, and some of the evidence appeared to be conflicting; but these difficulties have disappeared with the modern increase in historical knowledge, which is founded on the examination and study of original documents and inscriptions discovered during recent years.

We now proceed to find, from different sources, the limits within which the Nativity must have fallen.

THE YEAR.

(a) *The Nativity was between 10 B.C. and 5 B.C. according to St. Luke and Josephus.*

We are told in Luke iii, 23 R.V., that Christ was “about thirty years of age” when He began His Ministry. No date before 10 B.C. would agree with this statement, even if the earliest year historically possible is assumed for the beginning of His Ministry.

The Nativity could not have been later than 5 B.C. because it must have been at least three and a half months before the death of Herod, in order to allow time for the forty days of

* *Chronology, etc.*, vol. i, p. 93, Hales.

purification and for the departure to and stay in Egypt. Herod died shortly before Passover, 10th April, 4 B.C. This date rests on good historical evidence; Josephus states that an eclipse of the moon occurred shortly before it, and modern astronomical calculations have shown that an eclipse of the moon visible at Jerusalem took place as stated.

(b) *The Nativity was between 8 B.C. and 5 B.C. (the special rule of Quirinius) according to St. Luke and Justin Martyr.*

The Evangelist (Luke ii, 2) and Justin Martyr* both assert that Christ was born at the enrolment under Quirinius.

The Abbot Sanclemente, Zumpt and others have shown that Quirinius exercised high office as a general commanding troops engaged in war on the borders of Syria, and Prebendary H. Browne has shown that the time was between the years 12 B.C. and 1 B.C.† Sir W. M. Ramsay‡ has narrowed down this period within the limits about 8 B.C. to 5 B.C., and he has further shown that it was the Roman custom for a general engaged in a frontier war, as the direct representative of the Emperor, to rank superior to the ordinary governor who carried on his civil duties as usual. It is a strange historical fact that Quirinius was the ordinary civil governor in Syria at the next enrolment fourteen years later.

(c) *The Nativity was between 9 B.C. and 7 B.C., the ordinary rule of Sentius Saturninus according to Tertullian.*

Tertullian wrote,§ quoting records evidently existing in his time. "There is historical proof that at this very time (of the Nativity) a census had been taken by Sentius Saturninus." Saturninus ruled in Syria from 9 B.C. (some say from 8 B.C.) to 7 B.C.

Thus St. Luke and Justin Martyr asserted that the ruler at the time of the Nativity was Quirinius, while Tertullian stated he was Sentius Saturninus. This seeming contradiction is now explained, as it is now known that both ruled at the same time in Syria, each in his own capacity.

(d) *The Nativity was 8 B.C. (the first enrolment) according to St. Luke.*

It has now been demonstrated historically that Augustus initiated a periodic enrolment throughout the Empire every

* *Apol. I, 34, 46, and Trypho, 78.*

† *Ordo Sæculorum, 1844.*

‡ *Was Christ born in Bethlehem?* p. 241, Sir W. M. Ramsay.

§ *Against Marcion, Bk. IV, Ch. xix. Trans., Rev. P. Holmes, D.D.*

fourteen years. The first one took place in Syria in 8 B.C. Mr. Kenyon and Mr. Bell* have recently found an old order from the Prefect in Egypt dated A.D. 104, commanding all persons living at a distance to return to their homes for the then approaching census. The analogy with Luke ii, 1-3, is obvious.

THE TIME OF YEAR.

Not only is it possible to fix the year of the Nativity but the month; even the day of the month can be determined with a high degree of probability.

A definite time in the year had evidently been fixed for the enrolment by the authorities, as the condition of the Virgin Mary proves that the choice of the day was not left to individuals.

(e) *The Nativity was in warm weather, not in the winter.*

Lewin† well wrote: "The Nativity could not have been, as commonly supposed, in the winter for several reasons: (1) The shepherds and their flocks would not be in the open air during a winter's night. According to the Talmud cattle in Judæa were usually turned out at the Passover and brought back in October‡; (2) Mary, in an advanced state of pregnancy, would not have travelled with Joseph so far as from Nazareth to Bethlehem in the winter; (3) it is highly improbable that a census, which obliged persons to take distant journeys, should have been fixed for a winter month; a more natural time would be after harvest." We must remember that snow often lies heavily on the uplands of Judæa in the winter. In 1886 the son of Dr. Jessup of Beyrût was snowed up at Bethel as late in the year as the 10th April.

(f) *The first Enrolment, which fixes the date of the Nativity, was between August and October for the sake of convenience.*

Sir W. M. Ramsay points out that the authorities would select some time of year after the harvest and vintage had been gathered in, and before the time of ploughing, so that the people might be at leisure to come to the enrolment.

* *Luke the Physician*, 1908, p. 244, Sir W. M. Ramsay, who quotes *B. Museum, Papyri III*, p. 24, and *The Expository Times*, Oct., 1907, p. 41. Prof. J. H. Moulton.

† *Fasti Sacri*, 1865, p. 115.

‡ Sheep will not feed during the heat of the day in summer, and so they must be left to graze in the open fields at night. In winter they will feed by day and they are folded at night in Palestine for protection.

(g) *The first Enrolment was at the Feast of Tabernacles on account of the crowding of the inn at Bethlehem.*

Jerusalem was crowded three times a year at the great Feasts of Passover, Harvest and Tabernacles, when all male Israelites were ordered to appear before the Lord (Deut. xvi, 16). Bethlehem, only six miles distant, would also be crowded at those times. Enrolment by itself would not of necessity cause crowding, because many of the visitors would be sure to lodge with relatives whom they would find in their own village. But this crowding would be far more likely to happen if the Enrolment took place at one of the Feasts. The great Feast of Tabernacles is the only one of the triad which falls in the latter part of the summer, when the census must have been taken. The crowding at the inn, therefore, points to the probability that the Feast of Tabernacles was at hand.

(h) *The first Enrolment was on the first day of the Feast of Tabernacles, to suit the policy of Herod.*

As all male Jews were obliged to come to the Feast of Tabernacles, which is in the middle of the time of year most suitable for the census, it is almost certain that Herod would have ordered the enumeration to take place at that time, because that would obviate the necessity of a fresh journey being made on purpose, and of a fresh breaking into home routine on the part of the people. The linking of the census with a religious feast would render the new order palatable,* perhaps almost popular, and the *beginning* of the Feast (20th September in 8 B.C.) would be far the best time to choose, because the Jews would then have no opportunity to assemble and grumble before they complied with the order; and then, having obeyed, their attention would be taken away from the census, as they would be quickly absorbed with their religious exercises.

(i) *Enrolment at the Feast of Tabernacles 8 B.C. specially suited the policy of Herod.*

It is almost certain from historical data that the year autumn 10 B.C. to autumn 9 B.C. was a Sabbath year, when no sowing of seed or pruning of vines or olives was allowed (Lev. xxv, 3-5). Consequently, in the spring and autumn of 8 B.C. the people would give the greatest attention to agriculture,

* *Tacitus Ann.*, VI, 41, states that the Roman census was enforced on dependent princes. *Livy, Epit.*, lib. 137, states that census taking often led to disturbances.

as their supplies of corn and wine must have fallen very low, because there had been practically no harvest or vintage in the previous year. When all the fruits of the earth had been safely gathered in, the Feast of Tabernacles 8 B.C. must have been a specially joyous season, and therefore specially suited to Herod's purpose. It is not at all likely therefore that he would have delayed the census to a later year.

In reviewing these reasons for supposing that the census and consequently the Nativity was at the Feast of Tabernacles, Sir W. M. Ramsay* states: "This seems highly probable, and may even, I think, be regarded as approximating to certainty."

This opinion should give great force to the same conclusion for the date 8 B.C. drawn from the next line of investigation, which has been undertaken since Sir William wrote the words just quoted.

(j) *The Nativity was in the autumn of 8 B.C., because Zacharias was of the order of Abijah.*

The connection between these two events may not be at once apparent, but it is most interesting. There were twenty-four courses of priests (1 Chron. xxiv, 1-19). Each course served for a week (see 2 Chron. xxiii, 4, 8; 2 Kings xi, 5; 1 Chron. ix, 24, 25). We learn from Jewish records† that the first course, that of Jehoiarib, had just again begun their tour of service on the Sabbath day, the ninth of the fifth month, Ab., or 4th August, A.D. 70, when the Temple of Jerusalem was burnt by the soldiers of Titus. There is no reason to suppose that there was any break in the regularity of the sequence of the courses in the eighty years previous to that date, because the priests of that day were known to be most exact and punctilious in the performance of all their observances. Hence it is easy to calculate‡ when the eighth course, that of Abijah

* *The Expositor*, Jan., 1908, p. 18, and also *Luke the Physician*, 1908, p. 243.

† The Talmud (Taanith, p. 29, and Erachim, p. 11).

‡ To find for instance when the course of Abijah began its duties in 9 B.C. proceed as follows.

The first course began, we are told, on 4th Aug., A.D. 70, therefore the eighth course should have begun after 7×7 or 49 days later, *i.e.*, on the 22nd Sept., A.D. 70.

There are 78 years between 22nd Sept., 9 B.C., and 22nd Sept., A.D. 70. (It is always necessary to cast out one year in calculating from B.C. to A.D. or *vice versa*, as there is no year 0 in chronology.)

In those 78 years there are :—

$$78 \times 365 + \frac{78}{4} = 28,489 \text{ days.}$$

(1 Chron. xxiv, 10), began its duties during any of the years which could possibly have been the one just before the Nativity. Zacharias, the father of John the Baptist, belonged to the course of Abijah (Luke i, 5).

Table I states the dates of the first days of the course of Abijah during the years 10 B.C. to 7 B.C.; in other words it gives possible dates for the vision of Zacharias in the Temple (Luke i, 5-22).

TABLE I.

B.C.	Dates for the vision of Zacharias.			
10	[A] 25 February	[B] 12 August		
9	[C] 27 January	[D] 13 July	[E] 28 December.	
8	... ..	[F] 14 June	[G] 29 November.	
7	... ..	[H] 16 May	[I] 31 October.	

Each recurrence being 29 days earlier on each succeeding year, because $365 - 168 \times 2 = 29$ days (30 days earlier when a leap year intervenes.)

After the vision Zacharias fulfilled his ministrations, and then departed to his house, when his wife Elizabeth conceived (Luke i, 23, 24); this would be on the seventh day from the beginning of the course of Abijah, or from the vision.

The Annunciation took place "in the sixth month" of Elizabeth's pregnancy (Luke i, 26-38). In Hebrew* usage, in one instance, this expression indicates the first day of the month. In New Testament Greek, a like meaning is probable. The mention of the sixth month in Luke i, 26, just after the record of the completion of five months, supports this supposition.

(An extra day being added on every fourth (leap) year.)

The whole of one cycle of the twenty-four courses lasted for $24 \times 7 = 168$ days.

If we divide the 28,489 days by 168 days we get a result of 169 complete repetitions of the courses with a remainder of 97 days.

If we had subtracted 97 from the 28,489 before the division by 168, we should, of course, have obtained a result without remainder. If therefore we subtract 97 days from the interval of 78 years taking it off the earlier end, *i.e.*, counting from 22nd Sept., 9 B.C., we reach a date 25th Dec., 9 B.C., which must also have been a first day of a course of Abijah. Another first of Abijah was 168 days earlier, on the 13th July, 9 B.C. Hence all the other dates in Table I are readily found.

* *The Portable Commentary on Exodus xix*, 1, p. 48. Rev. R. Jamieson, D.D.

For the sake of definiteness and simplicity we shall assume for the present that this is the meaning. Consequently the Annunciation took place $7 + 29\frac{1}{2} \times 5 = 154\frac{1}{2}$ days, say 154 days after the first day of the course of Abijah when Zacharias had his vision. Hence we obtain Table II (in which the capital letters within square brackets refer to the same markings in Table I: thus [D], 14th December, of Table II, is 154 days later than [D], 13th July, of Table I).

TABLE II.

B.C.	Dates for the Annunciation.					
10	....	....	....	[A]	29 July	....
9	[B]	13 January	....	[C]	29 June	....
8	....	....	....	[E]	31 May	....
7	....	....	....	[G]	2 May	....
6	....	....	....	[I]	3 April	....
						[D] 14 December.
						[F] 15 November.
						[H] 17 October.

The dates for John's birth, Table III, depend upon the dates in Table I. The birth must have been exactly, or about 41 weeks or 287 days after the vision to Zacharias. Thus [D], 26 April, 8 B.C., of Table III, is 287 days later than [D], 13 July, 9 B.C., of Table I.

TABLE III.

B.C.	Dates for the birth of John the Baptist.					
10	....	....	....	....	[A]	9 December.
9	[B]	25 May	....	....	[C]	9 November.
8	[D]	26 April	....	....	[E]	11 October.
7	[F]	28 March	....	....	[G]	12 September.
6	[H]	27 February	....	....	[I]	14 August.

The dates for the Nativity, Table IV, depend upon the dates in Table II. The Nativity must have been exactly, or about 40 weeks or 280 days after the Annunciation. Thus [D], 20th September, 8 B.C., of Table IV, is 280 days later than [D], 14th December, 9 B.C., of Table II.

TABLE IV.

Dates of the first days of the feast of Tabernacles.	B.C.	Dates for the Nativity.			
1 October ...	9	[A]	4 May	[B]	19 October.
20 September ...	8	[C]	5 April	[D]	20 September.
8 or 9 October ...	7	[E]	7 March	[F]	22 August.
28 September	6	[G]	6 February....	[H]	24 July.

Inspection of Table IV informs us, that if the Nativity occurred at a Feast of Tabernacles—as Sir William Ramsay thinks may be regarded as approximating to certainty—then the year of the Nativity *must have been* 8 B.C.; because in none of the other years which are at all possible historically did the Feast of Tabernacles agree with the time for the Nativity, indicated by considerations connected with the date of the course of Abijah.

Remembering the difference of 29 (or 30) days in succeeding years, it is easy to see that, if Table IV had been extended two or three years more in both directions, the Nativity could not have occurred at a Feast of Tabernacles in any of the added years.

It is not claimed that this method above establishes exactly the day, 20th September, 8 B.C., for the Nativity, but it includes that day within narrow limits. It must be remembered that it is seldom possible to be certain which of two days was chosen for a new moon.

Had we taken the expression “in the sixth month” (Luke i, 26) to mean *any* day in that month, we see from Table IV that [D] would be extended for a month from the 20th September, 8 B.C., which would of course contain the whole Feast of Tabernacles. But if a month is added to all the other dates in Table IV none of them will contain any part of the Feast.

In other words, no date but 8 B.C. is possible for the Nativity (assuming that it must have been at the Feast of Tabernacles), even if we attach the ordinary meaning given to Luke i, 26, that *any* part of the month may be intended.

But we have previously found, see headings (g), (h) and (i) (p. 5), that the Nativity was on or about the first day of the Feast of Tabernacles, 20th September, 8 B.C. Working backwards 280

days we reach the 14th December, 9 B.C., for the Annunciation. We notice that this agrees with Table II, in which the assumption was made that the Annunciation was at the very beginning of the sixth month of Elizabeth's pregnancy. We thus demonstrate, independently of any grammatical considerations, that the expression, "in the sixth month" (Luke i, 26), referred to the first day of that month.

Summarising our results by looking for [D], in each table we obtain :—

TABLE V.

Summary of Dates.		
Events.		Exactly or nearly.
Vision of Zacharias	....	13 July, 9 B.C. A week before the new moon of the fifth month, Ab.
Annunciation	... ..	14 December, 9 B.C. New moon of the tenth month, Tebel.
Birth of John	....	26 April, 8 B.C. Full moon of second month, Zif or Jiar.
Nativity	....	20 September, 8 B.C. Full moon of seventh month, Tisri.

Inspection of an astronomical table of new moons informs us that there was a (Jewish) new moon on 20th July, 9 B.C., when Zacharias went to his house after his week of service ; this was at the beginning of the fifth month, Ab. ; the months of Elizabeth's pregnancy thus commenced with the new moons, and it must have been very easy to note when the sixth month began, viz., at the new moon of the tenth month, Tebel, which was therefore the time of the Annunciation. We must remember that with the Jewish calendar of lunar months and no printed almanacs, the phases of the moon were carefully noted by every one in recording the flight of time. It follows naturally that both John the Baptist and Christ must each have been born just about the time of a full moon, for 40 weeks, or 280 days, are almost exactly the same as $9\frac{1}{2}$ lunar months, which equal $9\frac{1}{2} \times 29\frac{1}{2} = 280\frac{1}{4}$ days. John was born at the full moon of the second month, when the Passover had sometimes been kept (Numbers ix, 10, 11 ; 2 Chron. xxx, 2, 15), and Christ was born at the full moon of the seventh month, which always indicated the Feast of Tabernacles (Lev. xxiii, 34).

This method of investigation* has been partially followed by Lewin†, who accepts the facts that the twenty-four courses each served for one week and that a first course began on the 4th August, A.D. 70. He assumes, however (from other considerations), that the Nativity was in the year 6 B.C. He adduces no reason for concluding that the Nativity was at a Feast of Tabernacles; and he evidently does not consider that the expression "in the sixth month" (Luke i, 26) means the first day of that month. Because although his calculations for the first day of the course of Abijah is the same as that in [H], Table I, viz., 16th May, 7 B.C., he, nevertheless, makes the Annunciation to be in November (giving no nearer approximation) instead of 17th October, 7 B.C., *vide* [H], Table II; and he makes the Nativity to have been in August (he does specify the day) instead of 24th July, 6 B.C., *vide* [H], Table IV.

But if we accept the strong reasons which we have previously considered, that the Nativity must have been at a Feast of Tabernacles, we must conclude that Lewin's own calculations negative the supposition that 6 B.C. could have been the year of the Birth of Christ, because we see from Table IV that the Feast of Tabernacles in that year did not begin until the 28th September, which is a month later than any possible day for the Nativity according to his calculations.

The only possible objection to so early a date as 8 B.C. for the Nativity is the fact that Christ must have been thirty-two years of age when He began His Ministry, on the assumption, now generally accepted, that the Crucifixion took place at Passover, A.D. 29, and also that His Ministry lasted for three years and a half. The Evangelist (Luke iii, 23) states that Christ was then "about thirty years of age." Commenting on this passage Dean Alford‡ wrote, "this admits of considerable latitude, but only in one direction, viz., over thirty years." An age between thirty and thirty-one cannot be intended, because Christ, as we have seen, was almost certainly born at a Feast of Tabernacles, yet when He visited the Temple at the Passover in His boyhood, the same Evangelist (Luke ii, 41-42) describes Him as "twelve years old," not *about* twelve years old. Consequently

* In the *Phoenix*, a collection of MSS. and printed tracts, 1707 (quoted in *The Christian Armoury*, Dec., 1903), the author endeavoured to find the time of year of the Nativity by this means. But he assumed that the first course of priests always began on the first day of the month Nisan, and he was evidently unaware that each course only served for a week.

† *Fasti Sacri*, p. 109. See also *Ordo Sæculorum*, p. 33. Rev. H. Browne.

‡ *The New Testament for English Readers* on Luke iii, 23.

the expression "about thirty" must mean an age some few *years* not *months* more than thirty.

The historical data available for determining the date of the Nativity are thus seen to be by no means scanty. There is considerable direct historical evidence, both Biblical and secular; the rulers of the day, Cæsar Augustus, Quirinius, Herod, and Archelaus, are all referred to in the sacred narrative, as was usual in ancient historical records. Various cycles or regularly recurring periods lend their aid: they are (1) The cycle of lunar eclipses, as one of them gives certitude to the date of Herod's death, which in its turn gives a limit to the possible date of the Nativity. (2) The cycle of Roman Enrolments every fourteen years. (3) The eight years' cycle of the shining of the Morning Star, as will be mentioned later on. (4) The seven years' cycle of the Sabbath year. (5) The annual cycle of the seasons which indicated times suitable and unsuitable for the census. (6) The annual cycle of the three great Feasts of the Lord, chiefly that of Tabernacles. (7) The woman's calendar of forty weeks. (8) The priests' courses of twenty-four weeks. (9) The forty days of the Purification. (10) The monthly cycle of the moon's phases is several times employed. (11) The week of seven days indicates the duration of each course of the priests; and (12) The daily cycle of day and night is made use of, for we are told that the Nativity occurred at night (Luke ii, 8, 11). Also we are helped in our search by considering (1) The difference of five months between the ages of the Baptist and his Master; (2) The customs of the people; (3) The policy of Herod; (4) The condition of the Virgin Mary on her journey to Bethlehem; (5) The arrangement of sheep at different seasons of the year; and (6) The meaning of one or two Greek grammatical expressions—all conspire to indicate 8 B.C. as the year of the Nativity. What other historical event in ancient, or even in modern history, is dated by such a quantity and variety of concordant evidence?

The foregoing arguments have not yet been controverted. No one has, however, criticised this chronology in any detail, with the exception of Sir W. M. Ramsay, who generously wrote in 1907 that the evidence in favour of the date 6 B.C. for the Nativity, which until then had generally been accepted as probable, "is distinctly slighter in character than that which supports the date 8 B.C." In 1908 he wrote again,* "This date 8 B.C. may now be accepted provisionally (for the Nativity) as

* *The Expositor*, Dec., 1908, and *Luke the Physician*, 1908, p. 246.

the only one which has all the evidence in its favour." Since he wrote these last words the line of investigation connected with the course of Abijah has been added. This strongly confirms the autumn of 8 B.C. and most probably the initial day of the Feast of Tabernacles as the date of the Nativity.

It is not unlikely that other lines of investigation may be found by other seekers to attest this date for the Nativity: on the other hand, it is possible that flaws may be found in some of the deductions in the preceding pages. At any rate it is hoped that this article may help to direct general attention to this subject now that so much data is at our disposal.

If this date is received as true, the reader of the Scriptures may perhaps find a practically fresh system of Bible study opening before him; because it will establish the trustworthiness of other methods by which the dates 8 B.C. for the Nativity and A.D. 29 for the Crucifixion were found without the aid of historical data other than those of a most general kind to which all agree.

The new methods depend upon a sound principle laid down long ago by Sir Isaac Newton that our Lord constantly alluded to things actually present in His teaching.

There are (it is believed) several allusions in the gospels to the actual periods of the shining of the Morning Star, during the time of Christ's life on earth; these cyclical periods are readily known from ordinary astronomical calculations, hence various gospel events can be dated, chief among them being the Nativity and the Crucifixion. There are also many allusions in the gospels to contemporary events connected with the Sabbath years A.D. 26-27, and one or two to the Sabbath year 10-9 B.C., hence another independent chronology is obtained.

These new methods both indicated 8 B.C. for the Nativity and A.D. 29 for the Crucifixion. Although this latter date agrees with that which is now generally thought to be probable, the date 8 B.C. found by the new methods for the Nativity was a good deal earlier than the date 6 B.C., which, until lately, had found most general acceptance. At first considerable disappointment was felt, and endeavours were made to see if the new methods would give results in accord with general opinion, but this they refused to do. Canon Sanday was then asked if any known historical data gave a positive denial to this early date. He most kindly replied, that he did not know of any, but he wrote that there are two historical points in favour of the date 8 B.C.: "(1) That it would probably suit the cycles of census

taking; (2) That it would bring the Nativity distinctly under Sentius Saturninus, which would agree with the express statement of Tertullian." Search was then made, with the result that *all* historical data were found to be in favour of 8 B.C.

It is thus hoped that attention may be directed to the new methods by which this date for the Nativity was first determined. If these methods are found to be reliable after further testing, they may perhaps be applied to the solution of other Biblical problems in the future.

If the date 8 B.C. is accepted for the Nativity, the concurrence of the evidence which is now found to point to only one date clears away any doubts which have in the past been cast upon the historical accuracy of St. Luke, and thus incidentally in our investigations we have the truthfulness of the sacred record brought before us in a marked manner—a very important point.

Rationalists and destructive critics are busy with careful study and thought; let the believer in the authority of the Bible search with reverent diligence, and he will find that truth and order, beauty and life will clothe even the dry bones of Scripture Chronology, and they will rise up a great army to contend for the truth of the word of God.

NOTE.

It is impossible within the limits of a paper for the Victoria Institute to enter into all the historical points connected with the Nativity. They are considered more fully in the author's book, *The Magi, how they recognised Christ's Star*, which also finds the chief gospel dates by the new methods.

DISCUSSION.

The CHAIRMAN felt sure that he expressed the unanimous feeling of the Meeting in saying that an extremely interesting statement had been put before them. Colonel Mackinlay had already shown himself as the astronomer of the Bible in his book *The Magi, how they recognised Christ's Star*, and he was now going on to be the chronologer.

One point was brought out quite clearly—that Christmas was at an entirely mistaken period of the year. They held that festival in the middle of winter, whereas the Nativity must have been at a time when the shepherds were tending their flocks in the field.

He could state from his own experience that the tableland of Bethlehem was exceedingly cold. When the party with which he was connected was coming back from an exploration of Palestine and Mount Sinai, they were at Jerusalem in the early days of January, and snow covered the whole country to a depth of two feet. They noted these things and wondered why Christmas, the commemoration of the birth of Christ, was placed at mid-winter. It was an anomaly that should be cleared up and the whole calendar should be revised.

MR. J. TOWNSEND TRENCH observed that in the paper which had just been read to the members of the Victoria Institute, in support of the year 8 B.C. being the year of the Nativity of our Lord, reference had been made to the dates of two other important events, which are inevitably involved in judging the date of the Nativity, namely, the date of the commencement of our Lord's Ministry, and the date of the Crucifixion.

The dates propounded in the paper referred to are as follows:—

(1) "*The Nativity*" (of Christ) "was in the autumn of 8 B.C." (page 202)—probably "20th September, in 8 B.C." (page 201)—and again "it is not claimed that this method above establishes exactly the day, 20th September, 8 B.C., for the Nativity, but it includes that day within narrow limits" (page 205).

(2) "Christ must have been 32 years of age when He *began His Ministry*, on the assumption now generally accepted, that *the Crucifixion* took place *at the Passover*, A.D. 29, and also that His Ministry *lasted three years and a half*" (page 207).

"The historical data available for determining the date of the Nativity are thus seen to be no means scanty."

(3) "If this date (for the Nativity) is received as true, the reader of the Scriptures may perhaps find a practically fresh system of Bible study opening before him, because it will establish the trustworthiness of other methods by which the dates 8 B.C. for the Nativity, and A.D. 29 for the Crucifixion, were found without the aid of historical data other than those of a most general kind to which all agree" (page 209), and further, "these new methods both

indicated 8 B.C. for the Nativity and A.D. 29 for the Crucifixion."

Thus they found that the author of the paper read, regarded those three important dates as being more or less linked together in the chain of evidence presented, and in the "practically fresh system of Bible study" which he advocated, of which he said (at page 209 of the paper) that "these new methods both indicated 8 B.C. for the Nativity and A.D. 29 for the Crucifixion."

He felt bound to draw the attention of the meeting to a *prophecy in Daniel ix, 25*, wherein is distinctly set forth and foretold *the precise year* of Christ's public entry into Jerusalem as her Prince or King, and of His almost immediately subsequent Crucifixion.

The language of the prophecy is perfectly simple. It fixes a certain starting point, then it gives the precise duration of time which is to elapse *from* the aforesaid starting point *up to* "Messiah the Prince."

The prophecy (Daniel ix, 25) runs thus:—"From the going forth of the command to restore and build Jerusalem" (street and wall) "unto Messiah the Prince, shall be seven weeks and three score and two weeks"; or rather, 7 sevens and 62 sevens, that is, 69 sevens, that is, 483 prophetic or Babylonian years.

The Word of God in the Book of Daniel leaves no doubt whatever as to the precise length of the prophetic year.

Of course, to institute a comparison of that prophecy with the records of secular history, the first step was to convert those 483 prophetic years into historic or solar years, and they found that 483 prophetic years of 360 days each, were equivalent to 476 historic or solar years of $365\frac{1}{4}$ days.

The starting point of the count they found in Nehemiah ii, 1-6, the commission to Nehemiah having been issued 445 B.C., which, in counting the years elapsing to the Cross, must be read as 444 B.C., so as to avoid counting A.D. twice.

There is therefore only one year in the history of the universe when Daniel's prophecy could have been fulfilled.

Namely	...	...	B.C. 444
To which add	...	...	A.D. 32

—

476 years.

And this gave with *unfailing certainty* the year date of the Crucifixion

as A.D. 32, that having been the time *God* appointed for the Crucifixion, as spoken by His servant Daniel.

He wished before he sat down, to draw their attention to Sir Robert Anderson's book (eighth edition) called *The Coming Prince*. Therein they would find the calculation set forth in full. (See pages 121 to 129.)

One thing was certain, and that was that in this case they were dealing with *fulfilled prophecy*, which could therefore be tested by history, and no date which would not fit, and fall in precisely with *God's predicted date*, could by any human possibility be the true date of the Crucifixion, and he had shown by quotations from the paper read, that it would be rather too late to affirm that this did not in any way affect the date of the Nativity or the date of the beginning of Christ's Ministry.

Sir ROBERT ANDERSON said that he had been much interested by his friend Colonel Mackinlay's paper, but could not accept his conclusions. At the Bar, and more recently in a position where he had to deal still more closely with evidence, he often found proof that it was easy to make out a clear case in support of a false issue if some salient fact were left out. And Colonel Mackinlay had left out the fact recorded in Luke iii that our Lord's Ministry began in the fifteenth year of Tiberius. Sir W. M. Ramsay, whom he had freely quoted, began life under the influence of the Tübingen school of criticism, and was thus led to give up the New Testament. But in the course of exploration work in Asia Minor he discovered that the Acts of the Apostles was the most accurate of ancient histories, and he was thus led to write a book in defence of the Gospel of Luke. Now even if that Gospel were treated merely as history the fact remained that the chronological statement of the 3rd chapter is one of the most definite in history, sacred or profane. It specifies the fifteenth year of Tiberius, and names seven different personages as holding certain specified offices in that year; and each of them in fact held the post assigned to him in the year in question. He was well aware of the nightmare system of exegesis, by which Scripture was always made to mean something different from what it says. But he had no patience with it. They were told that the fifteenth year meant really the twelfth year of his reign. But no historical statement, no coin, had ever been found in which the reign of Tiberius was reckoned in any but one way, and to suppose that the

Evangelist, writing for Romans, would discredit his work by such a fanciful conceit was, in his humble judgment, sheer nonsense.

The fact remains then that while Scripture had nowhere given the date of the Nativity it had fixed with absolute accuracy the year A.D. 29 as that in which the Lord entered on His public Ministry; and thus, assuming that the Ministry lasted three and a half years, they could with certainty fix A.D. 32 as the date of the Crucifixion. This being so the question they were discussing there was purely academic, and it must be made subordinate to this definite and salient fact. If he began to discuss in detail the points raised by the paper, they would all lose their dinner. Moreover he had dealt with them exhaustively in his book which Mr. Trench had cited in such flattering terms. He could not conclude without expressing his surprise that a discussion of the date upon the Nativity should ignore the labours of the greatest of our chronologers, Fynes Clinton, whose dictum is definite:—"The earliest possible date for the Nativity is the autumn of 6 B.C., eighteen months before the death of Herod in 4 B.C. The latest will be the autumn of 4 B.C., about six months before his death, assumed to be in spring 3 B.C."

Professor LANGHORNE ORCHARD pointed out that not all the arguments brought forward in the paper might be thought convincing. Certainly, they were not all of equal strength. But while it was true (as had been remarked) that the strength of a chain was only that of its weakest link, it should be remembered that the author's reasoning consisted of several chains of argument, and the weakness of a single chain might not impair the strength of others.

The strongest arguments were those furnished by the cycles of Roman census-taking, the contemporaneous rule in Syria of Quirinius and Saturninus, the lunar eclipse which gives certitude to the date of Herod's death, and the strong probability that the enrolment took place at the time of the Feast of Tabernacles. By these arguments, the author had made out a case not indeed of demonstration, but of considerable probability. The date 8 B.C. must be held to succeed as against 6 B.C. With regard, however, to the Crucifixion year, whether A.D. 29 be, or be not, the correct date, they would do well, in face of the criticisms of Mr. Townsend Trench and Sir Robert Anderson, to suspend judgment.

Canon GIRDLESTONE thought that the discussion had gone away from the real point, the date of our Lord's birth. Colonel Mackinlay laid no stress on A.D. 29 as the date of the Crucifixion. If his views were correct, then our Lord was on earth four more years than was usually supposed. The words about 30 years of age would then mean at least 34 years of age. This was a difficult point.

With regard to the date being about the Feast of Tabernacles, there was one little thing in favour of it, namely, that in the first chapter of St. John's Gospel, where they read that "the word was made flesh and dwelt among us," the word "dwelt" was literally "tabernacled" among us. This being the word, it seemed to fit in with the suggestion that He was born during the Feast of Tabernacles.

Lieut.-Colonel MACKINLAY.—Before replying to those who have spoken this afternoon, I should like to read a letter from Professor Burkitt, Norrisian Professor of Divinity, Cambridge. He writes: "My general opinions about the data in St. Luke that fix the year of the Nativity agree with what Professor Percy Gardner has written in *Encycl. Biblica* 3994 ff. (Art. Quirinius). I feel sure in my own mind that the evangelist's authority for introducing the name 'Cyrenius' was a misunderstanding of Josephus, *Ant.* xviii, 1.

"I also feel inclined to suspect the accuracy of the information about the course of Jehoiazab given in *Taanith*, but that is a matter that would need much further inquiry into the general accuracy of anecdotal (as distinct from customary) details in the Talmud, especially those which refer to the state of things before the destruction of the Temple.

"My scepticism, you will see, is not confined to what I find in the Bible.

"What you say about the time of year is very plausible, assuming the correctness of our authorities. But you will see from Professor Gardner's article that we differ too much in principle from you and from Sir William Ramsay to make discussion of details likely to be profitable."

Let us consider Professor Gardner's article in the *Encycl. Biblica*. He there states: "It is, however, pointed out that in a Roman census, every man reported at his place of residence; no instance is known to us in antiquity in which the citizens of a country migrated to the ancestral home of the family in order to be enrolled."

It is true that all were ignorant of any such instance (except in St. Luke's Gospel) when these words were published in 1903, but since that time Messrs. Kenyon and Bell *have* found an example of persons ordered to the ancestral home in order to be enrolled, as quoted on p. 200 of this afternoon's paper.

We thus see that Professor Gardner's theory of the historical untrustworthiness of St. Luke is supported on precarious negative evidence, which has since been destroyed by recent discovery, and yet Professor Burkitt still approves of Professor Gardner's deductions of six years ago!

Canon Girdlestone states and a gentleman writes, that if the Nativity were 8 B.C. and the Crucifixion A.D. 29 that Christ would have been about thirty-four years of age when He began His Ministry. It must be remembered, however, that there is no year 0 in chronology; A.D. 1 follows immediately after 1 B.C. Consequently, from autumn 1 B.C. to autumn A.D. 1 is only one year—not two years. It is easily seen, therefore, that if Christ were born in the autumn 8 B.C., and began His three-and-a-half-years' ministry in autumn A.D. 25, that He must then have been just thirty-two years, not thirty-four years of age. The same considerations apply to the remark of another correspondent, that if Christ were born 8 B.C. and died A.D. 29 He must have suffered at the age of thirty-seven. His age under our supposition was then only thirty-five-and-a-half years, as He was born in autumn and died in the spring.

Colonel Conder writes that Josephus dates the beginning of Herod's reign of thirty-seven years from his capture of Jerusalem, which was 37 B.C., because that historian states that the battle of Actium took place in the seventh year of his reign; this date is known to have been 2nd September, 31 B.C. There was a total eclipse of the moon on the 9th January, 1 B.C., visible at Jerusalem, whereas that of 13th March, 4 B.C., on which Whiston (whom all later writers have followed) relied, was only a small partial eclipse. Colonel Conder thinks that Herod died in the early spring of the year after this total eclipse, viz., in A.D. 1, at which time of year he states that fine weather often prevails on the Judæan mountains, rendering travel possible. He does not think that the action of the shepherds indicated hot weather, because sheep are kept in caves in Palestine, chiefly in winter. He believes that Dionysius Exiguus was more correct than modern chronologists who adopt

Whiston's view, and he draws attention to the fact that Clement of Alexandria (c. A.D. 180) believed the Nativity to have occurred in the 28th Augustus, or A.D. 1.

He thinks an erroneous gloss, "This taxing was first made when Cyrenius was governor of Syria," Luke ii, 2, has crept into the text.

I would urge in reply that the words referred to in Luke ii, 2, occurs in all the oldest MSS. There is absolutely no textual reason to suppose that it is a gloss which has crept into the text. Colonel Conder states in his book, *The City of Jerusalem*, that Herod was recognised as King by Augustus in 40 B.C. Practically all modern chronologists agree that the eclipse of 4 B.C., not that of 1 B.C., was the one which shortly preceded Herod's death. Although February is often fine in Palestine, the weather in that month could hardly be sufficiently reliable to enable large numbers of people to travel over the mountains. If the Nativity took place in February, the death of Herod must have been some months later, hardly before the middle of the year, because he ordered the destruction of all infants of two years old and under, and from this fact we must judge that the king considered that the Nativity had taken place several months previously.

Luke iii, 1, 2, tells us that John began his ministry in the fifteenth year at Tiberius; no estimate places this later than A.D. 29. If Christ were born A.D. 1 He could therefore hardly have been much more than twenty-eight years of age when John began to preach, and barely twenty-nine years old when He Himself began His Ministry, and yet Luke iii, 23, assures us that He was then about thirty years of age. Dean Alford tells us this means *more* not *less* than thirty years of age.

In reply to our chairman it is generally allowed that our Christmas day was adopted in place of a heathen festival connected with the old Sun worship at the winter solstice.

My thanks are due to Canon Girdlestone for pointing out that the subject of the papers is the accuracy of the date 8 B.C. for the Nativity, not that of A.D. 29 for the Crucifixion. The date of this latter event is only referred to incidentally, and even if it differs from A.D. 29 by a very few years, the date 8 B.C. may still be supported by it, because Dean Alford tells us that the expression "about thirty years of age" admits of *considerable* latitude.

I grant, however, that if a date of say A.D. 33 or later could be *proved* to be the true date of the Crucifixion that Luke iii, 2, 3, would not support the early date claimed in this paper for the Nativity. In reply to Mr. Townsend Trench and Sir Robert Anderson that the fourteenth year of Tiberius can only indicate A.D. 29, I affirm that a very large number of eminent chronologists are of opinion that it indicates an earlier date, because it was no uncommon plan to date from a time of *joint* rule before the Emperor reigned alone. I quite agree with Sir Robert Anderson that the Ministry of our Lord lasted for three-and-a-half years; there are many good reasons in favour of this assumption. But if this be so, it is impossible that Christ's Ministry began A.D. 29 and *also* that the Crucifixion was A.D. 32.

For if A.D. 29 is fixed "with absolute accuracy" as the date of the beginning of Christ's Ministry, we are conducted, after three-and-a-half years, to some time *after* midsummer A.D. 32. As the Crucifixion was certainly at early springtime, it must consequently have been in the next year, viz., A.D. 33.

If on the other hand A.D. 32 is taken "with certainty" to be the date of the Crucifixion, the Ministry must have begun three-and-a-half years before the spring of that year, or in the autumn of A.D. 28 *not* A.D. 29. Sir Robert Anderson's assumptions therefore hardly seem to be consistent with each other. Elsewhere I have advocated the widely received date A.D. 29 for the Crucifixion, and I am prepared to discuss it, if desired, but the present occasion hardly seems suitable to enter into that subject.

Sir Robert Anderson lays stress on the definite dictum of Fynes Clinton that the earliest possible date for the Nativity is the autumn of 6 B.C.—but this eminent chronologer of a bygone day was ignorant of the evidence which has since become available through recent archaeological research; the chief perhaps being the knowledge which we now possess of the regularly recurring enrolments throughout the Roman Empire every fourteen years. The actual dates of many of these enrolments are recorded on existing documents which have been discovered during recent years.

I quite agree with Canon Girdlestone in considering that the words in John i, 14, "The Word became flesh and tabernacled among us," support the suggestion that Christ was born at a feast of Tabernacles. But I had purposely avoided any typical or

spiritual allusions, and I had confined myself, for the sake of simplicity, to ordinary historical considerations. The Rev. J. Tuckwell and also Major-General Owen Hay suggest that people would *scatter* in going to their old homes in order to enrol: this might interfere with their *assembling together* at the feast of Tabernacles at Jerusalem. To this it is replied, Palestine is a small country; so small that any Jew could easily be present at his own town on the first day of the Feast, and also be present at the Temple at Jerusalem long before the close of the eight days of the feast. The Rev. Harrington Lees, M.A., also writes drawing attention to the fact that the northern Israelites at this period of the Nativity were of the *two* tribes not of the *ten*.* Consequently after enrolment all would be near Jerusalem because the districts apportioned to Judah and Benjamin were surrounding that city.

On one occasion the Lord Jesus went up to Jerusalem at the middle of the Feast of Tabernacles (John vii, 3, 8, 9, 10, 14). So others could have done the same in 8 B.C. after enrolment in their old homes.

Although it is now a year and a half since the majority of the arguments in favour of 8 B.C. have been published, no link in the evidence has yet been shown to be unreliable; on the contrary the fresh line of investigation connected with the courses of the priests has added further confirmation.

It naturally takes time to gain general acceptance for a date which has until now been in doubt: most people cautiously wait to see if any crushing argument can be brought against it. But the claims of this date are already attracting attention; for instance, the Rev. Canon Sanday, Oxford, writes, "I am at present working at other parts of the problem raised by the life of Our Lord; they are quite distant parts, and I am afraid it would involve a digression of a good many hours to form a deliberate opinion on the data which you lay before us so clearly. I am quite conscious that I must do so sooner or later." Other scholars besides Sir W. M. Ramsay have already pronounced a distinctly favourable judgment. Professor Flinders Petrie writes, "Many thanks for your paper, which seems very satisfactory." The Rev. T. Nichol, D.D.,

* *Luke the Physician*, p. 244, Sir W. M. Ramsay.

Professor of Biblical Criticism, University of Aberdeen, writes, "Taking your arguments as a whole, the convergence of so many lines of evidence is remarkable, and gives a high measure of probability to your conclusions," and the Rev. Chancellor Lias adds : "I think there can be little doubt that you have hit upon the true time of the Saviour's Birth."

It is therefore hoped that this subject will be further discussed in the future, because its investigation demonstrates the historic accuracy of the Gospels.

498TH ORDINARY MEETING.

MONDAY, MAY 17TH, 1909.

PROFESSOR H. LANGHORNE ORCHARD, M.A., B.Sc., IN THE CHAIR.

The Minutes of the previous Meeting were read and confirmed.

The following paper was then read by the author :—

AUTHORITY.

By The Very Rev. H. WACE, D.D., Dean of Canterbury.

IT will hardly, I think, be questioned that the subject of Authority, on which I am venturing to offer a few observations, is one of urgent practical importance at the present time. An indisposition to defer to authority is a conspicuous feature of life at the present day. The family life, the authority of parents—to modify a well-known phrase—has diminished, is diminishing, and grievously needs reinforcement. In politics we witness the growth of movements which, if not directly anarchical, propose to reconstitute life on bases of equality, from which the old authoritative organization would be excluded. Agitations, even by women, are conducted by means which involve violent repudiation of existing rules of order. In the Church, of which it has hitherto been considered a special duty to set an example of order, and of obedience to authority, we find clergy disregarding the directions of their ecclesiastical superiors, and openly and avowedly repudiating any obligation to obey the civil authority by which they and their Church are established. Abroad, particularly in France, we see the order of society threatened with entire subversion in the name

of Liberty, Equality and Fraternity. Not merely the Church, but all supernatural sanctions whatever, are repudiated by the French Government, and the spectacle offered by political and social life in that country seems simply that of a struggle for physical supremacy between various classes and interests and the Government of the hour. Italy presents a too similar spectacle, partly in spite of, and partly because of, the existence within it of a Church which claims absolute authority over all spheres of human life and thought. Amidst such confusions it would seem worth while to remind ourselves of what authority means—what is its source, and by what methods may it best be exercised.

If we look for the source of our idea of authority, we shall, I think, find it in the experience of our conscience. The sense of moral obligation, that we ought to do certain things, independently of the question what those things are, is the fundamental fact of moral life, and a primary instinct. The art of moral education depends upon the development and cultivation of this instinct. A child, indeed, soon finds that it must obey its parents because they can make it obey them; but if its obedience were based solely on that sense of superior force, it would acquire no sense of authority. It has been said that the first step in the moral battle of life is gained or won in the first conflict between the wills of mother and child. If the mother resorts at once to force, if she drags the child, for instance, away from the fire, the first battle is lost, for the child has learned only to yield to superior force. But if, as wise mothers know how, she can restrain the child by the influence of her voice or look, the child has learned to obey a moral authority and the first moral skirmish is won. The Scriptures go straight to the heart of human life when they represent our first parents as placed under a moral obligation to obey a superior command. When that moral obligation was disregarded, nothing remained but to enforce it by the compulsory obligation of physical consequences, and that is the cardinal reality of human life to the present day. Disregard or disparage moral authority, and sooner or later you have, for the time, to resort to physical compulsion in the general interests of society, until you can work slowly backwards, as God has been doing throughout human history, to the re-establishment of moral supremacy.

But if our conscience thus affords the experience from which we derive the idea of authority, we may be led by means of it to recognize the ultimate source of authority itself. It would

be impracticable on this occasion to pursue the full course of reasoning which justifies the conviction, expressed thousands of years ago in the 139th Psalm, that the voice of conscience is the voice of a personal God, a God who is in direct personal relation to us in our inmost souls, and from whose presence we can never escape. Nothing else, as has been shown with peculiar force by the late Dr. Martineau, will adequately explain the features of our moral consciousness. But, as the psalmist felt, this apprehension of God as the Lord of our conscience, as speaking to us in tones of authoritative command, involves the immediate recognition of Him as our Creator, and as knowing all the secrets of our frame and of our constitution. If this be the case, we are led to the recognition of there being one only living authority in the world, that authority being God Himself. Our Christian faith, indeed, establishes a supreme authority for us in the person of our Lord Jesus Christ. But that, as He Himself says, is because as the Son of God, and authorized by His Father, He exercises His Father's authority. As St. Paul describes the constitution and course of the world, "Then cometh the end, when he shall have delivered up the Kingdom to God, even the Father, when he shall have put down all rule and all authority and power. . . . And when all things shall be subdued unto Him, then shall the Son also Himself be subject unto Him that put all things under Him, that God may be all in all."

Thus the authority of our Christian Faith rests on the personal authority of Jesus Christ, and His authority rests on the personal authority of God the Father, whose voice, by His Spirit, speaks to our consciences. Our Lord accordingly treats our acceptance of His claims as dependent on our antecedent submission to the voice of God. "He that is of God, heareth God's words; ye therefore hear them not because ye are not of God." The whole history of human thought and life thus becomes a continued variation of the narrative of the third chapter of the Book of Genesis. God is perpetually speaking to men and they are either obeying His words, or hiding themselves from Him, or rejecting Him. Even their purely intellectual history is of the same nature if, as Dr. Martineau so impressively urges, Nature is but the display of His will and His laws within the physical sphere. When the Greek geometers developed the laws of the conic sections, they might seem, for long afterwards, to have been spinning purely speculative webs of little practical import. But when Kepler ascertained that the heavenly bodies

moved in ellipses, it proved that Euclid and his fellows had been learning the Divine Geometry, and that the truths they had discovered were the utterance of the Divine Mind. Through Nature, God is perpetually impressing one aspect of His own nature and will upon the human mind, and ever since the reopening, at the Reformation, of a sense of free communion between God and man, and the consequent encouragement of free communion with Nature, we have been learning more, not so much of her secrets, as of His.

It should be observed that the advance of our knowledge of the laws of Nature affords a strong analogy to our apprehension of God's will on other subjects, and illustrates the nature of the ultimate authority in the sphere of morality and religion. The only authority respecting Nature is Nature herself. Men put forward from time to time theories of her constitution and hypotheses of her action, theories like the Ptolemaic system and hypotheses like that of Darwin, and these become subjects of acute controversy. But no controversial arguments can ever decide the issue. Theologians or philosophers may dogmatize on either side; but what settles the matter is the voice of Nature herself, heard in further observations or experiments. Men may, at first, misunderstand God's voice in Nature, but He goes on speaking, and to those who go on listening, the misunderstanding is sure to be removed. Only four centuries ago, the Church was considered an authority on Nature. Sometimes great schools of scientific thought have exercised a paramount authority for a while, and have delayed advances in the interpretation of Nature. But the scientific world is now, probably, for ever emancipated from any such control, and all scientific thought is in the attitude of Samuel—"Speak, Lord, for thy servant heareth."

But the idea still lingers in others spheres of life and thought that there exists some human authority to which we can resort for the decision of questions of thought and action, and to which unquestioning deference is due. There is no doubt that men and women are constantly feeling after some such authority with a dim instinctive craving, and it is their very longing for it that too often renders them the victims of the first bold authoritative voice which asserts a claim over them. This constitutes, to a large extent, the strength of the Roman Catholic Church, and of that section of our own Church which so nearly approaches the Roman Church in character. In each case, the alleged authority is that of the Church. In the case of the Romanist, that authority is plain, visible and accessible. The Roman

Church is now concentrated in the Pope, and every Bishop or Priest represents and enforces his authority. For the section of our own Church to which I refer, there is no such visible and definite authority to be appealed to; but none the less the word "Church," and the supposed authority of what is called "The Church," exercises an almost magical influence. Practices are introduced among us, and enforced as matters of moral obligation, on no other ground than that they have the alleged authority of the Church. Other practices, which have seemed to many good men not merely convenient and harmless, but highly conducive to the maintenance of spiritual life among large and laborious classes, are not only discouraged, but vehemently denounced, on no other ground than the alleged authority of the Church. Above all, a certain system of doctrine, and a certain tone and character of worship, are alleged to be "Catholic," or in a special sense characteristic of "The Catholic Church"; and those who do not adopt this system and these customs are treated as defaulters to a recognized ideal. This ideal of the Church, or of the Catholic Church, assumes an imposing shape in the imagination, and Societies are formed, and religious newspapers conducted, with the definite object of making this ideal supreme in the English Church.

And yet there exists no reality, and since early times there has existed none, for which this ideal authority can be claimed. For a period, indeed, which has been limited by the present Margaret Professor at Oxford—no harsh judge on such matters—to about four centuries after Christ, concluding with the year A.D. 451,* there was a sufficient unity and continuity in the teaching, practice, and government of the Church to render it possible to recognize that that teaching, practice, and government had the marks of Catholicity. At the same time, it cannot for a moment be admitted that the rites and ceremonies then prevailing are, by reason of their Catholicity within that period, binding upon ourselves now. Some of the most conspicuous ceremonies then practised, alike at Baptism and at the Lord's Supper, are by general consent disused, and their re-introduction would never be suggested, even by those who are most urgent in asserting the authority of the Catholic Church. Many of the early Canons are quite impracticable for

* See Dr. Sanday's Letter in the *Report of the Fulham Conference*, 1900, p. 40.

enforcement among ourselves ; and on some important doctrines, such as the Atonement and the Resurrection of the body, views were put forward, even by Fathers of high authority, which no English theologian of any school in the present day would support. Even with respect to a peculiarly solemn document, the Creed of Chalcedon, the Western Church has not scrupled, without the authority of any similar council, to introduce momentous words, by which the East has ever since been divided from the West. If it be consistent with due reverence for the Catholic authority of the early Church to modify its definition of the doctrine of the Trinity, what statement or ordinance of that Church can there be, with respect to which a similar modification is not permissible ?

But pass beyond this period of substantial unity and Catholicity, and where is the Church, the one visible Church, to whose authority and voice we can appeal ? In the words of the Margaret Professor, "from the date A.D. 451 onwards the Christian world came to be so broken up into its several parts that the movement of the whole has practically lost its containing unity. Although the formal separation of East and West was delayed, the development of each was continued on more and more divergent lines." Before long, the East was actually divided from the West, and except from the point of view of the Roman Catholics, neither can be said to be "The Church." They are divided parts of "the whole congregation of Christian people dispersed throughout the whole world," and neither of them can claim that exclusive guidance of the Spirit of God, which is the necessary basis for any such unquestionable authority as is tacitly assumed. After some six more centuries the whole congregation of Christian people suffered another deep division ; and since the Reformation, half of Christian Europe, and not the least spiritual or least enlightened half, has renounced communion with the other. Amidst these divided communities of Christian men, where, except upon the theory of the Romanist, is that Church, that special Catholic Church, to be found, which is to be recognized as having a right to a predominant authority over all our belief and our practice ? Does it not seem as if, in the Providence of God, after the Church had once begun to admit error in doctrine and practice, He had allowed the fair unity of the primitive Church to be shattered into fragments, expressly in order to prevent men falling into the Roman error, and settling on some one visible community of fallible men as their supreme authority, and so supplanting an ideal by an idol ? If, moreover, an appeal is to be made to

the general authority of the Christian Church, by what right do you cut out of the continuous life of that Church four whole centuries, since the Reformation, of the history of some of the most vigorous and devoted Communion which the whole history of Christianity can show? The English Church, in particular, has existed in this land for thirteen centuries. By what right do you cut out of the experience and example of that Church nearly one-third of its whole existence, the four hundred years since the Reformation, and say that they shall not be taken into account in determining what catholic practices and doctrines are? This supposed Catholic Church, to which appeal is made by the extreme High Churchmen of our day, is, except so far as it can be identified with the primitive Church, a phantom of the imagination. In the mouth of the Romanist, the appeal to the Catholic Church has a clear and definite meaning. To adapt Bellarmine's words to the present day, the Romanist appeals to a Communion and an authority which is as visible and tangible as the Republic of France or the Kingdom of Italy. But in the mouth of an English Churchman, an appeal to the Catholic Church is an appeal to an authority which does not exist as a real authority, except so far as it is an appeal to the primitive Church; and even that Church, as we have seen, is not an absolute authority, even in its Creeds.

The ideal, no doubt, of the Christian Church is that the whole congregation of Christian people, dispersed throughout the whole world, should be so united in Christian charity, as to be able to bring their united wisdom and spiritual experience together in council, and so to guide, under the influence of the Spirit of God, the belief and the practice of the various local Churches. But no such authority has existed since the time of the primitive authority already mentioned. No General Council can now be appealed to; and in the absence of such general authority, each Church must exercise its own authority, on its own responsibility. But this being the case, the authority of my own Church is the only one that exists for me; and the only way in which I can discharge the duty of obedience to those who are set over me in the Lord, which is the acknowledged duty of every Christian man, is by dutifully submitting myself to this authority, so long as it requires nothing of me which I may be persuaded, on my conscience, is absolutely contrary to the Law of God. The only hope for the establishment of order in the Church at large consists in the cultivation of the habit of obedience to the authorities immediately over us. To appeal, from that authority, to some imaginary authority which has

now no real existence, and which has had none for at least 1,400 years, is simply to shelter the spirit of disobedience under an imaginary and fictitious ideal.

But if no such visible authority in matters of doctrine and practice can be found in the Church, it is certain that it can be found nowhere else, and in fact no other institution claims to possess it. No one but the Pope claims to be infallible. We acknowledge that even General Councils may err, and every secular authority would admit a similar impeachment. Yet for the practical guidance of mankind, and for the due control of human society, it is essential that there should be recognized standards of right and wrong, which exact a practical authority among us. How are such standards to be established, and in what custody are they to be maintained? To find an answer to this question we must recur to the fact that the Divine hand and voice, which are the only ultimate authority, are to be found in all great human organizations. That authority is to be found in its most immediate moral action in the Church. It is to be found also, in only less immediate, but not less direct action, in the State; and the natural authority, which, by the universal practice of mankind, is inherent in the governing powers of such States, must be regarded as Divine because it is, in the best sense, natural. It is a very remarkable fact that no State and no government has ever yet been established with the avowed intention of upholding wrong or immorality. The most iniquitous governments in practice that have ever existed have been obliged, by the very law of their nature, to claim to be established on righteous principles and for righteous ends. There is thus a universal testimony on the part of human nature that States, no less than Churches, exist for the enforcement of Divine laws of right and wrong, and consequently that there is an inherent authority in their rulers. This is the principle asserted by the inspired authority of St. Paul when he says that "there is no power but of God; the powers that be are ordained of God . . . For rulers are not a terror to good works, but to the evil."

That is the ideal of all secular government, and any ruling power which fails to make this its chief object is false to its great trust. It follows that every individual who is subject to a government, whether in Church or State, is subject to a Divinely established authority, and is bound to live and act in a spirit of deference to it. But, at the same time, since none of these authorities are infallible, occasions cannot but arise when each may fall into error, and attempt to enforce rules of conduct which

are inconsistent with true morality and religion. Moreover, the existence of the Christian Church within modern states has established another authority to which the individual's deference is still more urgently due; and cases consequently arise, and exist among us at this moment, in which the moral rules enforced by the Church are in direct conflict with those enforced by the State. It is a condition very injurious to the welfare of Society, because such a visible and practical conflict between two great authorities tends to shake, among people in general, the sense of the stability of moral law. Further than this, cases have arisen in which both Church and State have agreed in the moral and spiritual rules which they enforce, but in which they are nevertheless wrong, and no occasion thus arise in which, as at the time of the Reformation, individuals are obliged to stand by their own private convictions of religious and moral truth, and to assert the moral authority of their private consciences, with results which are of incalculable value to the future life of mankind.

The question, then, is—and it is a question which presses urgently for solution at the present moment—how are such conflicts of authority to be settled, and how are individuals to act when they arise? In the first place, if what has been said of the Divine nature and origin of all human authority be true, they cannot properly be decided by assuming that one of the conflicting authorities can claim divine sanction, and that the other cannot, and that the latter must therefore be overridden by the former. We may, indeed, reasonably think, as a general principle, that the Church which is, or ought to be, in special and constant communion with the Lord who is the source of all law and all authority, of all morality and religion, should be specially qualified to form a true judgment on such questions, for example, as those of the marriage law. But history proves conclusively that this general principle cannot be treated as an absolute one, and that the Church as well as the State is capable of erroneous action on such matters. In short, the two authorities are each Divine in origin, each may claim Divine sanction, and yet each may be in error; while the individual, whose obedience is distracted between the two, is himself more liable to error than either.

If so, the second rule we may lay down for our guidance in such difficulties is that the conflicting authorities should maintain the most scrupulous respect for one another, and should, before taking any action in such a conflict, do their utmost to come to an understanding on the point at issue

between them. It may be permitted to an English Churchman to think that the best example, at least in idea and intention, in this respect, is exhibited by the establishment of the relations of Church and State at the English Reformation. The object steadily kept in view by the secular and ecclesiastical statesmen of that time was to maintain a complete co-operation, almost amounting to identity, of action between the authorities of Church and State, and thus to maintain a permanent and universal standard for individual action. In proportion as the ties between the State and the established Church have been loosened, and the State has assumed a more and more secular complexion, this has become increasingly difficult; but a due regard to the good order and harmony of Society would indicate the necessity of continuing this old English habit of mutual consideration between Church and State as constantly and earnestly as possible. Nothing can be more injurious to the social peace of the community, and to the moral authority of law, than for statesmen to legislate on questions like marriage without regard to the existing law of the Church and without consulting its authorities; on the other hand, ecclesiastics are guilty of a similar fault if they peremptorily resolve that in whatever point the law of the State has come into conflict with the law of the Church, it is their duty, and that of the individuals who look to them for guidance, to enforce the law of the Church without hesitation and with the utmost rigour. If, in particular, the conflict arises, as at present it does, on points on which Christian men, and even Christian Churches, have been and are divided, it becomes a still more urgent duty to act with moderation, and to seek some course of action which will involve a reasonable mutual deference.

In a word, the only indefeasible authority in the world is that of the will of God, which is manifested through various sources, such as the Church under the guidance of the Scriptures, the State, and the individual conscience. The happiest condition of human society is when the first two, the Church and State, coincide. When, unhappily, they differ, neither of them has any absolute or Divine right to override the other, and the individual cannot escape the responsibility of his private conscience by an absolute submission to either. Each particular problem must be gradually worked out in a spirit of patience and mutual respect; and our consolation and hope must be found in the grand fact which underlies all these considerations, that the Divine authority is a living authority, constantly at work alike in the Church, in the State, in

families, and in the individual conscience, and that in proportion as we all submit ourselves to its influence with true and humble minds, we may be confident that the great promise will be fulfilled that we shall be guided into all the truth, not only of thought and belief, but of life and action.

DISCUSSION.

At the conclusion of the paper the CHAIRMAN called on Sir Robert Anderson, K.C.B., to open the discussion.

Sir ROBERT ANDERSON said that as citizens it was their duty to obey authority. But in the religious sphere there was a question of conscience behind the question of authority; and looking at the matter in a practical way the point in dispute was whether they should obey the Bible or the Church. If the claim of Rome be just, that the Church is the oracle of God, their part was not to search the Scriptures for themselves but to obey the Church. Now while it was only among the spiritual that they looked for spiritual intelligence, they were entitled to expect ordinary intelligence and common sense in men of the world. And they demanded why should they believe that the Church is the oracle of God? It must be either because the Church made this claim for itself, or because the Bible taught it. If the former, it was a flagrant case of the "confidence trick." If the latter let them appeal to the Bible. And what do they find? The figment that the Church of the Old Testament dispensation was an oracle, was grotesquely false. The revelation always came, not from or through the Church, but *to* the Church, through men divinely appointed to that ministry. Not only so, but these men were too often proscribed and persecuted by the Church. And the New Testament would lead them to a like conclusion respecting "the Christian Church." Rome confused the issue by confounding the Church as a vital unity—the "invisible Church, with the outward organisation, and by taking as addressed to that Church much that was spoken to the Apostles as such. But even this could not conceal the plain truth that the Church was the recipient and not the source of the revelation.

Another question arose here, could any organisation now on earth claim the position held by the Church as first founded? They rejected the figment of an historic sequence, save a sequence in guilt; and adopted the position of the Reformers, that the Holy Catholic Church is the whole company of Christian people dispersed throughout the whole world—the people of God scattered over the earth. Their study of the past history and present condition of Christendom would thus lead them back to the conclusion that the only authority they could acknowledge in the religious sphere was the Bible. Everything else was superstition or worse.

Rev. A. IRVING, D.Sc., B.A., regretted that he had not had the opportunity of following the paper as a whole, but so far as he could speak of it he thoroughly appreciated the line that the Dean of Canterbury had taken. He was glad to find that the author of the paper had come to realise the fact that there is no finality in Science, and therefore no room for dogmatism, even on the part of those who were most qualified to speak in the name of Science. He was the more interested in the paper, as, most opportunely, it had much in common with the ground taken by Dr. James Gairdner, C.B., the distinguished historian, in a correspondence on “Disestablishment” in the *Guardian* during the last few weeks. The speaker had himself taken a subordinate part in the controversy, and had been led to quote what he himself put into print some twenty years ago, to the effect that the Royal Supremacy properly understood implied no dictatorial powers on the part of the State towards the Church, but was rather the expression on the part of the English nation of its consciousness of the continuity of its national life on the religious side.

With regard to Sir Robert Anderson’s remarks, which were not easy to follow, he held that it was in the continuity of the life of the Church that we recognised its teaching authority; and that this had been embodied for all time in the Greek Testament Scriptures, which had come to us on the authority of the Church and on that alone; while those Scriptures carried their own inherent evidence to a sympathetic faith. He was thankful that the New Testament had had to run the fires of criticism and had survived the ordeal; since it now stood before the world on surer ground than it did previously as a sufficient record and guarantee of what Christ instructed His Spirit-taught Church to deliver to the world for its regeneration;

while that Church was His own creation as a divinely-constituted society for leavening the outer society of the world at large; that in fact the hermeneutical tradition of the Church, purified and adapted in the progress of the Christian age by learning and criticism under the illumination of the Spirit, as human thought widened, was the unbroken chain which carried us back to its Divine Founder, who had placed the *magisterium* of His Church on a higher plane than that which the old Hebrew prophets occupied. Thus we come to recognise the ultimate source of all authority in the Son of God Himself, who had transmitted His authority through His chosen witnesses, and had not centred it in any visible head on earth. "Believe Me for the very work's sake," is His appeal to evidence. "All authority is given unto Me," is His age-long claim.

Colonel T. H. HENDLEY, C.I.E.—The Dean has spoken of the loss of reverence for authority in Europe, but it is not confined to this part of the world, for, except perhaps in the far East, rulers and parents in Asia also grievously lament the universal want of submission to, and respect for, experience and old age. The wisest Indian parents feel it; Indian princes regret it, and both classes attribute it to the modern systems of education, and especially to European education, unaccompanied as it is by religious training, which is given not unfrequently by men who are either indifferent or even, it may be, who openly scoff at the old paths. He gave instances in proof of his contention, and referred to the opinions of some of the manliest Rajputs, who attributed the decay of authority to the facile pens and glib tongues which were encouraged in the present day, whereas such men as they had little opportunity of showing their loyalty. Turning to the Church, he quoted his own experience, in which a young clergyman, on succeeding a venerable and most successful man, had begun his pastorate by preaching from the words, "But with me it is a very small thing that I should be judged of you or any man's judgment," and had almost immediately turned everything upside down in the church. He understood that the only thing the Bishop could say was that no doubt that the places of those who were dissatisfied would soon be filled up. He asked what the laity could do when there was such a disregard for continuity and for even their own authority, as they were as much members of the Church as the clergy themselves.

If he turned to the authority of the Scriptures he was reminded

of a still more recent experience, when the previous week he had attended at a conference of school managers. A speaker on that occasion said he preferred Biblical teaching in schools to theological training, whereupon a clergyman asked what Bible he wished to teach. It was quite clear that the audience, which appeared to be earnest and religiously-minded, sympathised with the astonished speaker and not with the priest.

If then, the rank and file of the clergy cannot be relied upon to preserve authority and continuity of ritual and the like, and if the ordinary Bible is not authority, to whom is the unfortunate layman to turn for guidance? The Bishops sometimes tell us that the clergy will not obey, though they ask the laity to help them. Perhaps they might take a lesson from another church.

A few years ago an old friend who lived in Venice, whom he accompanied in his gondola across the Lagoon, had pointed out a certain island where there was a small convent. He said that it was said that sometimes the Patriarch called there with a young priest who had proved a little difficult, and left him with the head of the establishment until he called again. The call might be soon or might be late, but it was generally long enough to be effectual. Even if this story of the present Pope is too good to be true, might it not be a useful hint to some of our religious leaders who are anxious to preserve authority and respect for the Church?

The Rev. H. J. R. MARSTON said: They were probably all of one mind as to the need for and the beneficence of the results of authority. When they engaged in questions as to the sanction of authority in the Church their concern was rather with the practical continuance of the succession than with any speculative continuity. Undoubtedly there existed a real and tangible stream of Christian authority, not always flowing through councils or even through episcopal channels, but none the less real and persistent.

The question, What is the ultimate authority? was one that every age had claimed to answer, and every church, not always in the same way. Looking to their Holy Scriptures, they were entitled to say that the Greek Testament had, to a large degree, its own authority. down to the succeeding ages. They need not claim for it an authority, scientific and philosophic, as many had done. All the evidence clothed the New Testament with a real authority which had existed from the beginning of Christianity. The belief in

the divinity of Scripture was coeval with Christianity. It did not depend on the Fathers, it was prior to Irenaeus, for this belief was an aboriginal and essential part of the Christian faith.

Dean WACE, in replying, said the discussion had unfortunately missed the main point of the paper—the conflict between the Church and the State as to their respective spheres of authority. Both had great claims, and too often the rules as to moral duties laid down by the one were found to be in conflict with those laid down by the other. This led, as was continually being shown, to injurious as well as inconvenient results. Nor could the Disestablishment advocated by some do anything but aggravate the injury. At present both Church and State were restrained by their association with each other. Any authority left alone and unrestrained would lead to ruin. The Supremacy had held all the forces together till now, and prevented one from overriding another.

The CHAIRMAN, in summarising the paper and discussion, said the Society was indebted to the learned author for the most suggestive and able consideration of a subject the importance of which, at the present time especially, received too little practical acknowledgment. Without authority there could be no religion, there could be no morality—for morality is founded on religion. Take away authority, and the social order and fabric would be shattered and fall to pieces—a concourse, not fortuitous but shapeless and incoherent, of human atoms.

At this point the Chairman called for a hearty vote of thanks to the Dean of Canterbury, who had to leave the meeting. This having been given by acclamation, and acknowledged, he said there could be no doubt that (as was pointed out on p. 222 of the paper) it was in conscience or, as he preferred to call it, the moral faculty, that they were given the idea of authority, and that “the voice of conscience is the voice of a personal God.” It had historical authority. It had, too, the inherent claim, at every point, to a divine authority. There was contained the actual record of the words and works of the divine Word Himself, transmitted by those who were acknowledged to be the most fitted to hand them on. Authority was inherent in the moral relationship subsisting between God and man; it was connected with the ought. The notion of authority was not of an intellectual, but of a moral character—mere opinions were destitute of authority, even though professing to be

held "*semper, ubique, et ab omnibus.*" And they were reminded (pp. 227 and 230) that the voice of conscience has authority greater than that of the Church. As regards science they would cordially concur with the statement (p. 204) that all true scientific thought "is in the attitude of Samuel—'Speak, Lord, for Thy servant heareth.'" Nothing was more reverential than science. In view, however, of the manner in which a powerful scientific school was endeavouring to impose upon students an acceptance of the evolution theory, the belief that their advances in interpreting nature were no longer to suffer obstruction from unproved theories put forward by some scientists, appeared too optimistic.

Might he suggest that the word "Romish" (instead of "Roman") would better express the author's meaning in speaking of the "Roman Church" and the "Roman error"? The Romish Church referred to was not synonymous with the Christian Church to-day existing at Rome, nor with that of the Christian Church there in apostolic times.

One of the most interesting parts of the paper was that which discoursed of the delegated or derived authority of Church and State. Probably the historic conflicts between these powers might be largely accounted for by an endeavour on the part of each to usurp an authority belonging to the other, *e.g.*, the ecclesiastical has sought to bear the sword and to obtain the worldly possessions of the civil power; she had sought to wield an authority to which she had no right; it had not been given her.

It was important to distinguish authority from infallibility. Authority was not infallibility, nor were they necessarily conjoined. The authority of the civil power did not secure from error in its use, nor did the authority of those who were over them "in the Lord" give them always "a right judgment in all things." "Even general councils may err." Authority must not be stretched beyond the limits within which it has been given.

Infallible authority was from God alone. It was found in conscience—which is the inward standard, and in the outward standard—which is the word of God, the Bible interpreted to the humble and obedient heart by the Spirit of Truth.

The following communications have been received from Dr. W. WOODS SMYTH, Mr. T. W. E. HIGGINS and Bishop THORNTON.

Dr. W. WOODS SMYTH writes:—I regret to have to differ from the views of Dr. Wace. What constitutes authority? In answering this question we may perceive that authority may be either impersonal or personal. Science as a body of verified facts is impersonal, and is an absolute authority. The pronouncement of God, of man, or of the Church is personal authority. Now it is not said that God doeth everything according to His own will, but that He doeth all things according to the counsel of His own will. That is according to Supreme Reason, of which He has made us partakers. God's will is, therefore, not the ultimate formation of authority, but the counsel or Reason is. The authority of man upon any subject depends upon his knowledge, and still more upon his having seldom or never having made a mistake. An erring man has no authority. When we turn to the Church, which is a body or congregation of men, we find, as a matter of historic fact, that it is a tragedy as well as a "comedy of errors." We are, therefore, unable to accept its authority; and the reason lies in the fact that the counsel of God's will as expressed in His word and His works is not faithfully followed.

Now, inasmuch as the word of God is a written expression of the works of God in nature, the knowledge of which is presented to us in ascertained science, we are, therefore, shut up to the position that authority is founded in the word of God, viewed in the light of verified natural science, and interpreted by the reason which God has given us.

Mr. T. W. E. HIGGINS writes:—I venture to utter a protest against what appears to be the teaching of Dr. Wace on the duty of Christians as regards obedience in religious matters. And I do so the more reluctantly because he bases his argument on such a solid foundation on page 223, namely, on the personal authority of our Lord. Yet, he appears to teach an almost blind obedience to priestly authority in religious matters, and this I unhesitatingly repudiate.

On page 227 he informs us that the Catholic Church is a "phantom of the imagination," and on page 228 he says that authority is to be found "in its most immediate moral action in the Church." What Church? Again, on page 227, I am told that each church must exercise its own authority, and that the only way in which I can discharge my duty of obedience to those set over me in the Lord is by submitting myself to the authority immediately over me, "so

long as it requires nothing of me which I may be persuaded on my conscience is absolutely contrary to the law of God!" The authority in religious matters immediately over me is my parish priest. Am I to submit myself dutifully to him? Is it to be to the vicar of the parish in which I reside, or the clergyman of the church to which I go, or am I wrong in going anywhere but to my parish church?

Again, I am perplexed on pages 229 and 230. The English Church and State are in conflict on the law of marriage. Is it suggested that on such a vital matter there should be "reasonable mutual deference"? Is the deference to be also shown in America, or are the rules which are suggested for guidance only of local application?

I suggest with all deference to the learned Dean that more stress might have been laid upon the necessity of private judgment when dealing with the commandments of men, provided that we first acknowledge our need for the personal direction of the conscience by our Lord Himself.

Lastly, I do not think that justice is shown to those churchmen who, differing from the Dean, have opposed what they deem to be State encroachments into the sphere of religion. They have opposed the authority of the State because they conscientiously believe it to be an usurped authority, and there is very little doubt that such resistance on the part of churchmen must increase when we have judges calmly informing us, as one did in the case of *Banister v. Thompson*, that the law of God varied according to Act of Parliament. It is not likely that any churchman who believes in the "Holy Catholic Church" of the Apostles' Creed will substitute for it the Houses of Parliament.

Bishop THORNTON writes :—The Dean of Canterbury's paper on authority is very timely and interesting. A special question it raises is, What, for a Christian, is the supreme criterion of religious truth and duty? The answer must be that which the paper implies: the mind and will of God. He is bound to act on his conviction of what that is. And the organ through which that authority speaks to him is his own deliberate private judgment. In the absence of miraculous manifestations of it, the ultimate right to decide what God's mind and will is on any particular point of truth and duty must rest with the individual, and cannot be abdicated. "Him only shalt thou serve": on questions of right

and wrong we are subject only to the authority of God, and to those whom we recognise as speaking with His authority. Subject only to that, we judge for ourselves in all such matters. "Why yourselves judge ye not what is right?" Christ says: "Judge righteous judgment!" "Judge in yourselves." Says St. Paul: "Judge ye what I say"; "He that is spiritual judgeth all things"; "Let the prophets speak and let the others judge."

But, of course, in the exercise of this right of private judgment, the individual uses a respectful deference to the formulated judgment of the community as such, *i.e.*, to the Church of his allegiance and the realm of which he is providentially a citizen. In religious questions, our National Church has disclaimed all right to supersede what is plainly set forth in Scripture, and all infallibility in interpreting it.

Questions arising out of conflict between the convictions of individuals, the teaching of the church they belong to, and the law of their country, are questions of casuistry, and can only be solved as they arise. As a general principle, we can only insist on the authority of our individual judgment in serious questions of right and wrong, on which we are conscious of having taken all reasonable means of getting well informed.

I quite agree with the Dean in his light estimate of the current appeal made by some to "Catholicity" so called; but I cannot accept the disparaging generalisations as to Church history of Sir Robert Anderson or Dr. W. Woods Smyth.

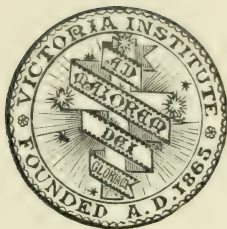
*BIOGRAPHICAL NOTICE OF THE LATE MR.
WILFRED H. HUDLESTON, F.R.S., Vice-President
of the Victoria Institute.*

WILFRED H. HUDLESTON was the son of Dr. John Simpson, who married Elizabeth Ward, heiress of the Hudlestons of Cumberland, and by letters patent assumed the name of Hudleston in 1867. Wilfred, the eldest son, was born in York on June 2nd, 1828. He received his early education at St. Peter's School, York, and entered St. John's College, Cambridge, where he graduated in 1850. In his last term in Cambridge he attended the lectures of Professor Sedgwick, and was much impressed by the manner and discourse of that eminent geologist. On leaving Cambridge he passed a considerable part of twelve years in travelling in Europe and North Africa.

From 1862 Mr. Hudleston applied himself to studies in natural science, attending the lectures of Playfair in Edinburgh, and those of Hoffman, Franklin, and Valentine at the Royal College of Chemistry in London, and his knowledge of geology may be considered to have commenced under the tuition of Professor John Morris, joining in excursions to places around London calculated to interest the students of that science. From this time geology became the prime subject of his pursuits. In 1867, he was elected Fellow of the Geological Society, and in 1892 he became its President. He had contributed several papers on geological subjects.

In 1891 Mr. Hudleston became a Member of the Victoria Institute; and immediately after, was elected one of its Vice-Presidents. Though he does not appear to have contributed original papers to its transactions, he evinced a warm interest in its proceedings by attending the meetings and taking part in the discussions. Mr. Hudleston's last appearance at the meetings of the Society was on the evening of December 4th last, when he took part in the discussion of Professor Hull's paper on "Geneva and Chamounix as they were fifty years ago, and as they are now." His interesting speech—corrected by himself—appears along with the paper in the present volume. The Members of the Institute will long regret the absence from their midst of Mr. Hudleston's striking personality and fine intellectual countenance.

E. H.



LIST OF THE
VICE-PATRONS, MEMBERS, ASSOCIATES,
&c.

VICE-PATRON.
A. McARTHUR, ESQ., D.L., J.P.

* * * The Qualification of a Vice-Patron is a Contribution of not
* * * less than Sixty Guineas to the Funds of the Institute.

COUNCIL AND OFFICERS.

President.

THE RIGHT HONOURABLE THE EARL OF HALSBURY,
D.C.L., F.R.S.

Vice-Presidents.

SIR T. FOWELL BUXTON, BART., K.C.M.G.
ALEXANDER McARTHUR, ESQ., D.L., J.P.
DAVID HOWARD, ESQ., D.L., F.C.S., F.I.C., *f.c. (Trustee)*.
LORD STRATHCONA AND MOUNT ROYAL, G.C.M.G., LL.D.
LIEUT.-GEN. SIR H. L. GEARY, R.A., K.C.B.
PROFESSOR EDWARD HULL, M.A., LL.D., F.R.S., F.G.S.

Honorary Correspondents.

SIR DAVID GILL, K.C.B., LL.D., F.R.S.	
PROF. A. AGASSIZ, D.C.L., F.R.S.	PROF. A. H. SAYCE, D.D., LL.D.
PROF. MASPERO (<i>Paris</i>).	PROF. WARREN UPHAM, D.Sc.
PROF. E. NAVILLE (<i>Geneva</i>).	
HIS EXCELLENCY HERR FRIDTJOF NANSEN, D.Sc.	

Honorary Auditors.

J. ALLEN, ESQ.	LIEUT.-COL. G. MACKINLAY, LATE R.A.
----------------	--

Honorary Treasurer.

EDWARD S. M. PEROWNE, ESQ., F.S.A.

Secretary and Editor of the Journal.

H. CHARLEWOOD TURNER, ESQ., M.A.

Council.

(*In Order of Election.*)

REV. DR. F. W. TREMLETT, D.D., D.C.L., PH.D.
VERY REV. H. WACE, D.D., *Dean of Canterbury (Trustee)*.
REV. CHANCELLOR J. J. LIAS, M.A.
REV. CANON R. B. GIRDLESTONE, M.A.
THEO. G. PINCHES, ESQ., LL.D., M.R.A.S.
VEN. ARCHDEACON W. M. SINCLAIR, M.A., D.D.
COMMANDER G. P. HEATH, R.N.
REV. G. F. WHIDBORNE, M.A., F.G.S., F.R.G.S.
EDWARD STANLEY M. PEROWNE, ESQ., F.S.A.
MARTIN LUTHER ROUSE, ESQ., B.L.
REV. JOHN TUCKWELL, M.R.A.S.
LIEUT.-COLONEL GEORGE MACKINLAY.
GENERAL J. G. HALLIDAY.
COLONEL T. HOLBEIN HENDLEY, C.I.E.
ARTHUR W. SUTTON, ESQ., J.P., F.L.S.
REV. PREBENDARY H. E. FOX, M.A.
PROFESSOR H. LANGHORNE ORCHARD, M.A., B.Sc.
RT. REV. BISHOP J. E. C. WELLDON, D.D.
SYDNEY T. KLEIN, ESQ., F.L.S., F.R.A.S., M.R.I.
WILLIAM J. HORNER, ESQ.
FREDERIC S. BISHOP, ESQ., M.A., J.P.
ALFRED T. SCHOFIELD, ESQ., M.D.
HEYWOOD SMITH, ESQ., M.A., M.D.

* *Members of Council.*

† *Life Members or Life Associates.*

‡ *Specially Elected.*

¶ *Distinguishes those who have contributed Papers to the Institute.*

§ *Foundation Members or Associates (elected before Dec. 31, 1866).*
f.c. *Finance Committee (Six Members).*

✠ *Those through whom legacies have been received.*

MEMBERS.

A.

- 1876 Aitken, Rev. Canon W. Hay M. H. M.A. Oxon.
1895 Alves, Lt.-Colonel M. A. R.E.
1901 Ami, Professor Henry M. M.A. D.Sc. F.G.S. F.R.S.
Canada.

B.

- 1882 †Baring, Rev. F. H. M.A. Camb. F.R.G.S.
1869 †Barker, John L. Esq.
1881 Barton, James, Esq. B.A. M. Inst. C.E.
1901 †Bell, Colonel Alexander W. C. (late Indian Army).
1903 Bermuda Library, Trustees of.
1873 Bevan, Francis A. Esq. J.P.
1879 *Bishop, F. S. Esq. M.A. Oxon. M.A. Cantab. J.P.
1908 Bowles, Edward Augustus, Esq. M.A. Cantab. F.L.S.
F.E.S.
1907 Braun, Mrs. Annie E. von.
1909 Broadbent, Cecil, Esq. F.S.Sc. F.R. Met. Soc.
M.R.S.A.
1884 Brown, Rev. Claud, M.A. Oxon.
1889 Browne, John, Esq. C.E.
1907 Bruce, Rev. John Collingwood Gainsford, M.A.
1896 *Buxton, Sir T. Fowell, Bart. K.C.M.G. F.R.G.S.
(VICE-PRESIDENT).

C.

- 1891 Carr, Rev. Arthur, M.A., late Fell. Oriel, Hon. Sec.
Cent. Soc. Higher Relig. Educ.
1894 Chapman, Geo. John, Esq. M.A. S.C.L. F.Z.S.

- 1904 Clough, G. Benson, Esq.
 1890 Collins, Brenton H. Esq. J.P.
 1889 Cooper, S. Joshua, Esq.
 1871 †Coote, Sir A. C. P. Bart. M.A. Camb. F.R.G.S.
 1905 Corrie, Josiah Owen, Esq. B.A. F.R.A.S. *Barr.*
 1872 Coxhead, Rev. J. J. M.A.
 1897 Cunningham, Francis A. Esq. M.A. B.Sc. Attorney-at-Law.

D.

- 1871 †Day, William, Esq.
 1903 Deacon, J. F. W. Esq. M.A. J.P. D.L.
 1889 †Dodge, Rev. D. Stuart, M.A.
 1899 Drummond, Mrs. J. M. A.
 1903 Ducie, Right Hon. The Earl of, F.R.S. F.G.S.

E.

- 1882 †Ellis, Alston, Esq. A.M. Ph.D. LL.D.

F.

- 1878 Fairfax, Sir James R.
 1904 Finn, Alexander, Esq. F.R.G.S., British Consulate, Chicago, U.S.
 1902 Foote, Robert Bruce, Esq. F.G.S.
 1875 *Fox, Rev. Prebendary H. E. M.A. Camb.
 1876 Freeman, Miss F. H.
 1892 Fremlin, R. H. Esq.
 1889 Fremlin, R. J. Esq.

G.

- 1904 Galloway, Professor William, F.G.S.
 1892 *Geary, Lieut.-General Sir H. L. K.C.B. R.A.
 (VICE-PRESIDENT.)
 1908 Gerard, Rev. Father John, S.J.
 1877 †*Girdlestone, Rev. Canon R. B. M.A.
 1875 †Godson, E. Probyn, Esq. B.A. Camb.
 1896 †Gregg, Rev. David, D.D. LL.D.

H.

- 1899 *Halliday, General J. G.
 1888 HALSBURY, The Right Hon. Hardinge Stanley Giffard
 Earl of, K.G. P.C. F.R.S. (PRESIDENT.)

- 1901 Harrison, Edgar Erat, Esq.
 1882 Head, J. Merrick, Esq. F.R.G.S.
 1893 *Heath, Captain G. P. R.N.
 1890 Hellier, Rev. Henry Griffin, Balliol Coll. Oxon.
 1906 Hersensohnn, Joshua R. Esq.
 1879 †Hingston, C. A. Esq. M.D. B.Sc. Lond.
 1895 Hooper, George Norgate, Esq. F.R.G.S. F.S.S.
 1906* Horner, William J. Esq.
 1873¶*Howard, David, Esq. D.L. F.C.S. F.I.C. (VICE-PRESIDENT.)
 1873 Howard, R. Luke, Esq. F.R.M.S.
 1873 Howard, Theodore, Esq.
 1873 †Howard, W. Dillworth, Esq.
 1888*†¶Hull, Professor E. M.A. LL.D. F.R.S. F.G.S.; late
 Director of the Geological Survey of Ireland,
 Acad. Sci. Philad. Corresp. Soc. Geol. de Belg.
 (VICE-PRESIDENT).
 1901 Hull, Edmund C. P. Esq. J.P.

I.

- 1880 Ince, Rev. Canon W. D.D. Reg. Prof. Div. Oxf. Chap.
 to Bishop of Oxford.

J.

- 1891 †Jex-Blake, The Very Rev. T. W. D.D. Dean of Wells.

K.

- 1893 †Kinnaird, The Honourable Louisa E.
 1900*¶Klein, Sydney T. Esq. F.L.S. F.R.A.S. F.R.M.S.
 F.E.S. M.R.I.

L.

- 1891¶†Lansdell, Rev. Henry, D.D. Memb. Rl. Asiatic Soc.
 F.R.G.S.
 1898 Laurence, Miss M. A.
 1875¶*Lias, Rev. Chancellor J. J. M.A. Hulsean Lecturer
 1884.
 1887 Loveday, Miss L. E.

M.

- 1909 MacEwan, Miss Madge D.
 1897¶*Mackinlay, Lieut.-Colonel George, late R.A. (*Hon.
 Auditor*).
 1885 †Marshall, Rev. C. J.

- 1907 Martin, George H. Esq. M.D.
 1901 Matthews, Ernest R. Esq. A.M.I.C.E. F.G.S.
 1872 Matthews, John T. Esq.
 1908 Maunder, E. Walter, Esq. F.R.A.S.
 1878 *†McARTHUR, ALEXANDER, Esq. D.L. J.P. F.R.G.S.
 (VICE-PATRON).
 1909 McLarty, Pharmacist Colin, U.S.N.
 1898 Molony, Edmund Alexander, Esq. (Indian Civil Service).
 1905 †Mortimer, Rev. Alfred G. D.D. Philadelphia.
 1881 †Mullens, Josiah, Esq. F.R.G.S.

N.

- 1878 NELSON, The Right Hon. The Earl.
 1881 Newton, Rev. Preb. Horace, M.A. Camb. Prebendary of York.

O.

- 1902 Olsen, Ole Theodor, Esq. D.Sc. F.L.S. F.R.A.S. F.R.G.S. Ord, Wasa, Sweden, Ord St. Olaf of Norway; St. Andrew's Terrace, Grimsby.
 1891*†¶Orchard, H. Langhorne, Esq. Prof. of Logic, M.A. B.Sc. (Gunning Prizeman 1909.)

P.

- 1881 †Patton, Rev. F. L. D.D. LL.D. Prof. Relations of Philosophy and Science to the Christian Religion, Principal, Princeton Theo. Seminary.
 1894 *Perowne, Edward Stanley Mould, Esq. F.S.A. (HON. TREASURER.)
 1896 †Petter, Rev. W. D. H. M.A. Camb.
 1872 †Phené, J. S. Esq. LL.D. F.S.A. F.G.S. F.R.G.S.
 1882 †Pogson, Miss E. Isis; F.M.S. Meteorological Reporter and Assist.-Govt. Astronomer, Madras.
 1888 †Powell, Sir F. S. Bart. M.P. F.R.G.S.

R.

- 1880 Rivington, Rev. Cecil S. M.A. Hon. Canon of Bombay.
 1909 Roget, Professor F. F.
 1899¶*Rouse, Martin Luther, Esq. B.L.
 1872 Rowe, Rev. G. Stringer.

S.

- 1903 Schuster, Rev. William Percy, M.A. Oxon.
 1882 †Scott-Blacklaw, Alex. Esq.

- 1904 Sewell, Ebenezer J. Esq.
 1889 †Simpson, Prof. Sir A. R. M.D.
 1893 Smart, Francis G. Esq. M.A. M.B. F.L.S. F.R.G.S.
 F.S.A.
 1873 Smith, Philip Vernon. Esq. M.A. LL.D.
 1875 ¶Stewart, Rev. Alex. M.D. LL.D.
 1892 †Stilwell, John Pakenham, Esq. J.P.
 1885 †Strathcona and Mount Royal, Lord. G.C.M.G. LL.D.
 F.R.G.S. F.G.S. (VICE-PRESIDENT.)
 1903 ¶*Sutton, Arthur W. Esq. J.P., F.L.S.
 1906 Sutton, Leonard, Esq. F.L.S.
 1888 Sutton, Martin J. Esq. J.P. F.L.S. F.R.G.S. Chev.
 Leg. of Honour.

T.

- 1881 †Taylor, Rev. Canon Robert.
 1908 Thirle, James W. Esq. LL.D. M.R.A.S.
 1906 Townley, Rev. Charles F. M.A.
 1897 Townsend, Rev. Professor L. Tracy, D.D. LL.D.
 1899 Tremlett, James Dyer. Esq. (Barr.-at-Law) M.A.
 Camb.
 1871 *Tremlett, Rev. Dr. F. W. D.D. D.C.L. Hon. Ph.D.
 Jena Univ. F.R.G.S. Chaplain to Lord Waterpark,
 Eccles. Com. for American Prelates and the Univ.
 of the South.
 1889 Tritton, Joseph H. Esq. F.R.G.S. F.S.S.
 1894 ¶*Tuckwell, Rev. John, M.R.A.S.
 1908 Turner, Henry Charlewood, Esq. M.A. Camb.
 (SECRETARY).
 1883 Turton, Lt.-Col. W. H. D.S.O. R.E. F.R.G.S.

U.

- 1889 Urquhart, Rev. John (Gunning Prizeman, 1905).
 1880 Usherwood, The Ven. Archdeacon T. E. M.A.

V.

- 1875 †Veasey, H. Esq. F.R.C.S.

W.

- 1876 ¶*Wacé. Very Rev. H. D.D. Dean of Canterbury: Hon.
 Chap. to the Queen; late Principal of King's
 College, Lond.
 1873 Walters, William Melmoth, Esq.
 1878 †Watson, Rev. A. Duff, M.A. B.D.

- 1903 †Whidborne, Miss Alice M.
 1888*†Whidborne, Rev. G. F. M.A. Camb. F.G.S. F.R.G.S.
 1909 White, Colonel Frederick B. P.
 ⚭ Whitwell, Robert J. Esq., B.Litt.
 1899 †Wigram, Rev. E. F. E. M.A.
 1894 Williams, Colonel Robert, M.P.
 1879 Willis, Right Rev. Alfred, D.D.
 1887 Wilson, Rev. B. R. M.A.
 ⚭ Wright, Francis Beresford, Esq. M.A. Cantab. J.P.
 F.R.H.S.
 1907 Wright, Rev. Professor George Frederick, D.D.
 LL.D. F.G.S.A.

Y.












- 1876 Young, C. E. Baring, Esq. M.A. F.R.G.S.

ASSOCIATES.

- 1878 Adams, Rev. Canon James.
 1894 Adams, Rev. Wm. W. D.D.
 1896 Anderson, Sir Robert, K.C.B. LL.D.
 1888 †Andrews, Rt. Rev. Walter, M.A. Bishop of Hokkaido,
 Japan.
 1869 †Armagh, The Most Rev. W. Alexander, D.D. D.C.L.
 Archbishop of. Primate and Metropolitan of all
 Ireland.
 1905 Arnström, Rev. D. A.
 1887 Arrowsmith, E. M. Esq.
 1887 Ashby, Robert, Esq.
 1888 ¶Ashwin, Rev. C. Godfrey, M.A.
 1909 Ashwin, Rev. Edward Godfrey, M.A. Camb.
 1906 Ashwin, Rev. Forster, B.A.
 1909 Ashwin, Rev. Hamilton, LL.D. T.C.D.
 1891 †Atkinson, Rev. Edward, D.D. Master Clare Coll.
 Cambridge.
 1876 Badger, Rev. W. C. M.A.
 1906 Baker, Lt.-Colonel W. W. R.E.
 1909 Banks, Edwin H., Esq. M.A. D.L. J.P.
 1893 Barlow, Rev. C. H. M.A. Oxon. Chap. Bengal.
 1902 Barton, Rev. Professor G. A. Ph.D.
 1909 Beachcroft, Miss Mary.
 1906 Bent, Mrs. Theodore.
 1887 Berry, Rev. Canon D. M. M.A. Oxon. Demi of Magd.
 Ellerton Prizeman.
 1894 Bevan, Ven. Archdeacon H. E. J. M.A. Camb.
 Gresham Prof. of Divinity.
 1890 †Bigelow, Professor Melville M. Ph.D.
 1874 Billing, Rev. F. A. M.A. LL.D. F.R.S.L.
 1888 Bird, Arthur, Esq. F.R.G.S.
 1904 †Birkett, Rev. Arthur Ismay, M.A.
 1905 Blandy, Miss Grace.
 1900 Bolton, Miss Elsie H.
 1890 Bomford, Rev. L. G. M.A.
 1902 Boord, Miss Eva J.
 1891 ¶Boyd, Rev. T. Hunter.
 1895 Breed, Rev. Professor David R. D.D.
 1895 Breed, Rev. F. W. B.A. Durham.
 1887 Bridgeman, Col. the Hon. Francis C.
 1882 Broadbent, Colonel J. E. C.B. R.E.
 1900 Brown, J. Walter, Esq.
 1893 †Bryan, Joseph Davies, Esq.

- 1894†¶Bullen, Rev. R. Ashington, B.A. F.L.S. F.G.S.
 1893 Buswell, Ven. Archdeacon H. D.
 1892 †Butt, Rev. Canon G. H. B.A.
 1889 †Cain, Rev. John.
 1907 Carus-Wilson, Henry, Esq.
 1894 Carroll, A. Esq. M.D. D.Lit. Ph.D. D.Sc.
 1889 †Caudwell, Eber, Esq. M.R.C.S.E. L.R.C.P.
 1890 †Caudwell, Paul, Esq. B.A. Solicitor.
 1894 Chambré, Very Reverend A. St. J. B.A. M.A. D.D.
 Dean.
 1906 Chambré, Colonel H. W. Alan.
 1889 Chatterton, Rev. F. W.
 1884 Chichester, Rev. E. A. M.A. R.D. Hon. Canon of
 Winchester.
 1909 Chichester, Henry H. L. Esq.
 1888 Clapton, Edward, Esq. M.D. F.R.C.P. F.L.S.
 F.R.G.S.
 1888 Clyde, Rev. J. C. A.B. A.M. D.D.
 1891 †Cobern, Rev. Prof. Camden M. B.A. S.T.B. Ph.D.
 1893 Cockin, Rev. J.
 1906 Collett, Sidney, Esq.
 1905 Collison, Harry, Esq. M.A. Barr.
 1906 Cooke, Charles J. Bowen, Esq. M.Inst.C.E.
 1885 †Coote, S. V. Esq. M.A. Oxon. F.R.G.S.
 1877 Crewdson, Rev. Canon G. M.A. Camb.
 1908 Crewdson, Miss Gwendolen, M.A.
 1890 Crosbie, Rev. Howard A. M.A.
 1890 Cruddas, W. D. Esq. D.L. J.P.
 1908 Dale, William, Esq. F.S.A. F.G.S.
 1895 Darling, Rev. John Lindsey, M.A. T.C.D.
 1884 Daunt, Rev. Canon W. M.A.
 1905 Davidson, Rev. D. C. M.A.
 1876 Dawson, Rev. W. M.A. F.R.H.S.
 1880 Day, Rev. A. G. M.A. Oxon.
 1888 Deedes, Ven. Archdeacon Brook, M.A.
 1894 †Della Rocchetta, of Dolceacqua, Count Arthur, late
 Capt. in the General Staff of Italian Army.
 1908 Derr, Andrew F., Esq. M.A.
 1890 †De Witt, Rev. Prof. John, D.D.
 1869 Dibdin, Charles, Esq. F.R.G.S. Sec. Rl. Nat. Lifeboat
 Inst. Hon. Memb. Cor. Société des Institutions de
 Prévoyance.
 1898 Dibdin, R. W. Esq. F.R.G.S.
 1874 Dimond-Churchward, Rev. Prebendary M. D. M.A.
 1907 Dixon, Rev. Edwin Church, M.A. S.T.B.
 1897 Drake-Brockman, William Drake, Esq., late Sup.
 Engineer P.W.D. India; late A.I.C.E.
 1888 DUNLEATH, The Rt. Hon. H. L. Lord.
 1885 Durham, The Rt. Reverend H. C. G. Moule, D.D.
 Bishop of.

- 1880 Du-Sautoy, Mrs. F. P.
 1883 Ebbs, Miss Ellen Hawkins.
 1891 Eckersley, Rev. Jas. M.A.
 1889 †Eddy, Mrs. Mary B. G.
 1885 ¶†Elwin, Rev. Arthur.
 1909 Evans, George, Esq.
 1880 Escott, Rev. Hay Sweet, M.A.
 1886 Evans, Mrs. H. M.
 1896 Evington, Right Rev. Bishop H. D.D. (Bishop in
 Kiushiu, S. Japan).
 1899 Fairbairn, H. A. Esq. M.D. M.A.
 1899 †Farquharson, Mrs. M.
 1892 Feilden, J. Leyland, Esq.
 1905 Fells, J. M. Esq.
 1876 Field, Rev. Arthur T. M.A. Camb.
 1896 †Field-King, J. M.D. C.S.D.
 1879 Finnemore, Rev. J. M.A. Ph.D. F.G.S.
 1885 Fleming, Rev. R. H. B.A. D.D.
 1881 Fleming, Sir Sandford, K.C.M.G. LL.D. F.G.S.
 F.R.G.S. V.-President Royal Soc. of Canada.
 1900 Flint, Charles A. Esq.
 1889 †FLORIDA, The Right Rev. E. G. Weed, D.D. S.T.D.
 Bishop of.
 1909 Flügel, Herr Pastor Otto.
 1897 Flourney, Rev. Parke Poindexter, D.D.
 1894 †Forster, Miss E. J.
 1882 †Fox, C. Dillworth, Esq.
 1904 ¶†Frost, Edward P. Esq. D.L. J.P.
 1900 Gardiner, E. J. Esq.
 1873 †Gardner, Mrs. Ernest L.
 1897 Garnett, Thomas, Esq.
 ¶†Gedge, Sydney, Esq. M.A. F.R.G.S.
 1899 Gibbon, Major J. Aubrey, R.E.
 1908 Gilbertson, Francis W. Esq.
 1908 Given, J. C. M., Esq. M.D.
 1903 Goodridge, Richard E. W. Esq.
 1881 Gray, Charles, Esq.
 1903 Gray, Brigade Surgeon Robert, M.D.
 1877 Greenstreet, Colonel W. L. R.E.
 1897 Greer, Mrs. Thomas.
 1902 Gregg, Ivo Francis Hy. Carr, Esq. M.B.A.A.
 1881 Grey, Rev. H. G. M.A.
 1901 ¶†Griswold, Rev. H. D. M.A. Ph.D.
 1897 Gutch, George A. Esq. C.E.
 1892 Hall, Hugh Fergie, Esq. M.A. F.G.S.
 1903 Hamlyn-Harris, Dr. Ronald, D.Sc. F.G.S. F.L.S.
 1896 Hanna, His Honour Judge Septimus J. LL.D.
 1899 Harlowe, David, Esq.
 1901 Harmer, F. W. Esq. J.P. F.G.S.
 1878 Harper, The Ven. Archdeacon H. W. M.A.

- 1907 Harris, H. Neville, Esq.
 1904 Heaton, James Esq. Memb. Soc. Arts.
 1909 Hechler, Rev. Prof. W. H.
 1908 Hemming, Miss A. E.
 1903  Hendley, Colonel Thomas Holbein, C.I.E. (Indian Medical Service, *retired*).
 1908 Hendley, Lieut.-Col. Harold, I.M.S. M.R.C.S. M.D. Durh. D.P.H. Camb.
 1908 Hendley, Mrs.
 1889  Herbert, Rev. Edward P.
 1896 Hewitt, David Basil, Esq. B.A. L.R.C.S. L.R.C.P. J.P.
 1882 Hicks, Rev. Edward, M.A. D.D. D.C.L.
 1891 Higgins, T. W. E. Esq. A.M.I.C.E.
 1892  Hildesley, Rev. Principal A. H. M.A. Sanawar.
 1901 Hodges, Rev. Albert H.
 1908 Hodgkin, Miss Alice Mary.
 1897 Hodgson, Rev. William, M.A. Oxon.
 1902  Hogarth, Rev. Oswald J. M.A.
 1883  Houstoun, G. L. Esq. F.G.S.
 1902 Howard, Sir Frederick, J.P.
 1888 Howard, Joseph, Esq. B.A. Lond. F.R.G.S.
 1903 Hull, Charles Murchison, Esq. Civil Service, Natal.
 1900 Hull, Edward Gordon, M.A. M.D. Dub.
 1897 Hutton, Henry, Esq.
 1890 Hyslop, Rev. James, M.A. Ph.D.
 1904  Irving, Rev. Alexander, D.Sc. F.G.S.
 1902  Jacob, Colonel Sir S. Swinton, K.C.I.E. Jaipur.
 1898 Janvier, Rev. Cæsar A. Rodney, M.A. (Princeton).
 1904 Jenkins, J. Heald, Esq. M.A.
 1902 Jessop, Arthur, Esq.
 1877 Jewell, F. G. Esq.
 1907 Jewett, Rev. Professor Frank L. B.A. B.D.
 1907 Job, Rev. Charles Robert M.A. Camb.
 1891 Johnson, C. R. Esq. H. Sec. Brighthouse Ch. Lit. Club.
 1896  Johnstone, Miss J. A.
 1879 Kaye, The Ven. W. F. J. M.A. Oxon. Archdeacon and Canon of Lincoln.
 Kemble, Mrs. Stephen Cattley.
 1898 Kerr, Robert, Esq.
 1895  Kidd, Walter Aubrey, Esq. M.D. B.S. M.R.C.S. F.Z.S.
 1884 Kimball, John E. Esq. A.M. Yale (Sup. Pub. Sc.)
 1883 Kimm, Rev. W. F. M.A. late Fell. Cath. Coll. Camb.
 1908 Kizer, Rev. Edwin D.
 1887 Kirkpatrick, Rev. R. C. M.A. Oxon. and Dub.
 1880  Knight, Rev. C. F. M.A. Camb.
 1908 Kwang, Sim Boon, Esq. Singapore.
 1884 Lach-Szyrma, Rev. W. S. M.A. Oxon.
 1905 Lampe, Rev. Joseph L. D.D.

- 1873 Lawrence, Ven. Archdeacon C. D. M.A.
 1873 Lea, Miss G. E.
 1905 Lees, Rev. Harrington Clare M.A.
 1901 Lefroy, The Right Rev. G. A. D.D. Bishop of Lahore,
 India.
 1873 †Lewis, Rev. J. S. M.A.
 1897 Linton, Rev. E. C. M.A. Camb.
 1883 †Lock, Rev. W. M.A. D.D. Oxon. Fell. Jun. Bursar
 and Tutor of Magdalen, Warden of Keble
 College.
 1892 †Logan, The Honourable James D.
 1908 Longdon, Miss Caroline Mary.
 1901 Lönbeck, Fredrick Waldemar, Stockholm.
 1909 Lovely, Rev. F. Cecil, B.A. Oxon.
 1887 Lowber, Rev. Chancellor J. W. M.A. LL.D. D.C.L.
 Sc.D. Ph.D. P.S.D. F.R.G.S. Litt.D.
 1888 Lowrie, Rev. S. T. M.A. D.D.
 1908 Lupton, Sydney, Esq. M.A. F.C.S.
 1882 Maitland, Rev. H. F. M.A. Oxon.
 1908 Manley, Rev. G. T. M.A. Camb.
 1902 Manwaring, George A. Esq. C.E.
 1909 Marston, Rev. Herbert J. R. M.A. Durh.
 1893 †Martineau, A. E. Esq. (Ind. Civ. Serv.).
 1892 †Masterman, E. W. Gurney, Esq. F.R.C.S. F.R.G.S.
 D.P.H.
 1909 Maunsell, Rev. F. W. M.A. Dub.
 1888 Maxwell of Calderwood, Lady.
 1894 Mead, Rev. Charles Marsh, Prof. Th.
 1892 †Mello, Rev. J. Magens, M.A. F.G.S.
 1879 Methuen, Rev. T. Plumptre, M.A.
 1889 Millingen, J. R. Van, Esq.
 †Milner, Rev. W. M. H. M.A. Oxon. F.R.G.S.
 1903 Mitchinson, Right Rev. Bishop J. D.D. D.C.L.
 1899 Moffat, Rev. J. S. C.M.G.
 1892 †Molony, Major Francis A. R.E.
 1907 Moore, Rev. Henry N. M.A.
 1882 Moule, Ven. Archdeacon A. E. B.D. (Mid China).
 1878 †Mullings, John, Esq.
 1893 Munt, George William, Esq.
 1871 †Nelson, J. H. Esq. M.A.
 1885 †Neve, A. Esq. F.R.C.S. L.R.C.P. Edin.
 1888 †Nimr, Faris, Esq. (Ed. "Mouktataf"), Cairo.
 1887 Norbury, Inspector-Gen. Sir H. F. K.C.B. M.D.
 F.R.C.S. R.N.
 1880 Nursey, Rev. Percy Fairfax, M.A. Oxon.
 1879 †Oake, Rev. R. C.
 1886 Oates, Rev. Alfred.
 1880 O'Dell, Professor Stackpool E.
 1908 †Oke, Alfred William, Esq. B.A. LL.M.
 1899 Orr, Major Walter Hood, I.M.S.

- 1891 Oulton, Rev. Richard Charles, M.A. B.D.
 1898 Parker, Rev. Alvin Pierson, D.D.; President, Anglo-Chinese College, Shanghai.
 1905 Partridge, Deputy Surgeon-General W.P.
 1883 Paterson, Rev. T. M. B.
 1903 Payne, George Herbert, Esq.
 1885 †Payne, J. A. Otonba, Esq. F.R.G.S. Chief Registrar and Taxing Master of the Supreme Court of Lagos.
 1894 Peake, A. S. Rev. Professor, M.A. D.D. Oxon. Fell. Merton, late Tutor Mansfield Coll. Oxon.
 1908 Peirce, Harold, Esq.
 1887 †Penford, Rev. E. J.
 1908 Perkins, Walter R. Esq.
 1903 Petch, Rev. Charles Cousens, B.A.
 1894 Pike, Rev. Sidney, M.A. Camb.
 1884 Piper, F. H. Esq.
 1881 Pippet, Rev. W. A.
 1896 Plantz, Rev. President Samuel, D.D. Ph.D.
 1898 Potter, Ven. Archdeacon Beresford, M.A. T.C.D.
 1881 Pratt, Rev. J. W. M.A. D.D.
 1880 †Priestley, Rev. J. J. S.P.G.
 1888 †Pringle, of Torwoodlee, Mrs.
 1903 Proctor, Henry, Esq. H.M.C.S. M.R.A.S. F.R.S.L.
 1891 Reddie, Edward J. Esq.
 1894 Reed, F. R. Cowper, Esq. M.A. F.G.S. Asst. to Woodwardian Prof. of Geology Camb.
 1876 Rendell, Rev. Canon A. M. M.A. Camb.
 1899 Revie, Rev. Dugald, M.B. C.M. Glas. Univ. Free Church of Scot. Medical Mission.
 1877 Rhodes, Rev. D.
 1882 Ridley, Rt. Rev. Bishop W. D.D.
 1885 Riggs, Rev. J. F. B.A. M.A. D.D.
 1899 ¶Robinson, Rev. Andrew Craig M.A.
 1895 Robinson, Maj.-General C. G. R.A.
 1894 Rogerson, Rev. Geo. M.A.
 1906 Roscoe, John Henry, Esq.
 1900 Rosedale, Rev. H. G. D.D. Oxon., F.S.A. F.R.S.L.
 1884 †Ross, Rev. G. H. W. Lockhart, B.A.
 1908 Rouse, Miss Ellen.
 1891 Rouse, Rev. G. H. LL.B.
 1881 ROYSTON, The Right Rev. Bishop P. S. D.D.
 1903 Ryan, Hugh S. K. Esq. M.A. Camb.
 1883 St. Andrew's University, Court of; Stuart Grace, Esq. Factor.
 1891 St. Johns, New Brunswick Free Pub. Lib. J. R. Reul, Esq. Chairman.
 1903 Salmensaari, Herra Sulo, B.A. Finland.
 1881 Sandford, H. Esq.
 1895 SASKATCHEWAN, Right Rev. J. Newnham, D.D. Bishop of.

- 1891*¶ Schofield, Alfred Taylor, Esq. M.D.
 1908 Schwartz, John, Esq. Junior.
 1906 Searle, Malcolm W. Esq. K.C. M.A. LL.B.
 1876 † Seeley, Rev. E.
 1875° Sharp, Rev. J. M.A. Queen's Coll. Oxon.; Editorial
 Superintendent, Bible Soc.
 1902 Sharpe, W. E. Thompson, Esq. M.A.
 1882 Shepherd, Mrs. F. Wolfskill De.
 1901 † Sherard, Rev. Clement E. M.A. Camb.
 1882 Shore, Captain the Hon. H. N. R.N.
 1906 Sidebottom, Colonel W.
 1876¶*† Sinclair, The Ven. Archdeacon W. Macdonald, M.A.
 D.D. form. Sch. of Balliol, Oxon.
 1903 Singapore, Right Rev. C. J. Ferguson Davie, Bishop of.
 1909 Skrine, Rev. John Huntley, M.A. Oxon.
 1907 Smith, Mrs. Aline Gerard.
 1892 Smith, Hon. Sir Charles Abercrombie, M.A. Fell.
 St. Peter's Coll. Camb.
 1901 † Smith-Bosanquet, Miss Ella.
 1873 Smith, Major-General E. Davidson.
 1896 Smith, Colonel George Hugh.
 1893 Smith, Sir George J. J.P. D.L.
 1906 *Smith, Heywood, Esq. M.A. M.D.
 1906 Smith, Richard Tilden, Esq.
 1891 Smith, S. Ashley, Esq. M.D.
 1902 Smyth, William Woods, Esq. L.R.C.S. L.R.C.P.
 1903 Spencer, Professor J. W. Ph.D. F.G.S.
 1879 ¶ Statham, E. J. Esq. C.E. A.I.C.E.
 1879 † Stewart, Alex. Esq.
 1872 Stewart, Sir Mark J. McTaggart, Bart. M.A. M.P.
 1890 † Stokes, Anson Phelps, Esq. Vice-Pres. XIX Cent.
 Club U.S.A. Memb. Council, S.S. Assoc.
 1894 Stokes, James, Esq. Officer of the Legion of Honour.
 1887 Stokes, Rev. W. Fenwick, M.A.
 1903 Stovin, Mrs. Caroline.
 1902 † Strong, John Alexander, Esq.
 1902 † Strong, Rev. Rupert S. M.A. Camb.
 1895 Swinburne, Hon. George, C.E.
 1899 Symonds, Hon. J. W.
 1899 † Talmage, Professor James E. Ph.D. F.R.M.S. F.G.S.
 F.R.S.E. F.G.S.A.
 1873 Tapon, Rev. R. K.C.L.
 1882 Taylor, Rev. Hugh Walker, M.A.
 1891 † Taylor, Rev. Stephen, B.A. Corpus C. Coll. Camb.
 1905 Thomas, Rev. W. H. Griffith, D.D. Principal Wycliffe
 Hall, Oxford.
 ¶ Thornton, the Right Rev. Samuel, D.D. late Bishop
 of Ballarat.
 1906 Tindall, Miss Caroline.
 1873 Tomkins, Rev. W. Smith.

- 1908 Treanor, Rev. Thomas Stanley, M.A., T.C.D.
 1907 Trench, Mrs. Charles Chevenix.
 1909 Trench, F. P. Esq. F.R.C.S.
 1908 Trench, J. Townsend, Esq.
 1902 Trumbull, C. G. Esq. Philadelphia.
 1908 Turnbull, G. L. Esq. M.A. M.D. Oxon.
 1909 Turner, Arthur Charlewood, Esq. M.A. Camb.
 1903 ¶Turner, Rev. F. Storrs, B.A.
 1908 Turner, Rev. Ralph Charlewood, M.A. Camb.
 1882 TUTTLE, Right Rev. D. S. D.D. Bishop of Missouri.
 1902 Twigg, John Hill, Esq. late India Civil Service.
 1898 Tydeman, E. Esq. B.A. F.R.G.S. Lawrence Military Asylum.
 1887 Uhl, Rev. L. L. D.D. Principal A.E.L.M. College, Guntur, India.
 1907 Ussher, W. A. E. Esq. F.G.S.
 1876 WAIAPU, Right Rev. William Leonard Williams, B.A. Bishop of.
 1893 Waller, Rev. C. Cameron, M.A. Camb. Principal of Huron Coll.
 1906 Wallington, Charles, Esq.
 1892 Walter, Rev. H. M. M.A. Oriel Oxon.
 1894 Ward, H. B. Esq.
 1881 Waring, F. J. Esq. C.M.G. M.Inst.C.E.
 1882 †Warrington, Miss E.
 1895 Way, the Right Hon. Sir Samuel James, D.C.L. LL.D. Chief Justice S. Aust.
 1895 Weaver, George M. Esq.
 1879 Webb-Peploe, Rev. Prebendary H. W. M.A. Camb.
 1898 Weightman, Miss Ialice.
 1893*†WELLDON, Right Rev. Bishop J. E. C. D.D. Dean of Manchester.
 1889 †WELLINGTON, Right Rev. Frederic Wallis, D.D. Bishop of.
 1887 Wherry, Rev. E. M. D.D. Lodhiana, Punjâb, India.
 1907 White, Rev. G. E. M.A. B.D.
 1882 White, Rev. J. M.A. T.C.D. Hon. M.A. Magd. Oxf.
 1894 †Whitehead, Rev. George B.A. Lond.
 1881 ¶Whiting, Rev. J. Bradford, M.A. Camb.
 1870¶†Whitmee, Rev. S. J. F.R.G.S. Cor. Mem. Z.S.
 1881 †Williams, H. S. Esq. M.A. F.R.A.S. A.C.
 1882 Willis, The Ven. Archdeacon W. N.
 1896 Wills, Harold Temple, Esq. M.A. B.Sc.
 1907 Winfield, Rev. J. Abbott.
 1885 Winslow, Rev. W. C. D.D. D.C.L. LL.D. L.H.D. D.Sc. S.T.D. Ph.D. Amer. Vice - President Egypt Exploration Fund.
 1889 †Winter, The Ven. Archdeacon G. Smith.
 1877 Wood, Rev. Canon A. Maitland, M.A.
 1893 Wood, Peter F. Esq. F.R.G.S.

- 1899 Wood, Walter James, Esq. F.R.M.S.
 1892 †Woodd, Rev. C. H. Basil, M.A. Camb. Nat. Sci. Trip.
 1890, M.A.
 1877 Worthington, T. Esq. B.A. T.C.D.
 1903 †Wright, Rev. Ernest Alexanderson, M.A.
JF Young, Rev. Charles, M.A. Camb.
 1894 Zimmerman, Rev. Jeremiah, M.A. D.D. LL.D.
-

CLERK.

- 1884 Montague, Mr. A. E.
 77, *Hungerford Road, Camden Road, N.W.*

LIBRARY ASSOCIATES.

- Adelaide Public Library, *South Australia*.
 Berlin Royal Library (per Asher & Co.).
 Birmingham Free Library.
 Boston Public Library (per Kegan Paul & Co.).
 Chicago University, *U.S.A.*
 Dublin Society, Royal.
^L Harvard University (per Kegan Paul & Co.).
^T Libraire Le Soudier, 174B, *St. Germaine, Paris*.
 Manchester, The John Rylands Library.
^L Melbourne Public Lib. and Museum, *Melbourne, Victoria*.
 Michigan, University of Ann Arbor.
^L Mitchell Library (F. T. Barrett, Esq.), 21, *Miller Street, Glasgow*.
 Newcastle-on-Tyne Public Library.
 New York Public Library, *New York, U.S.A.*
 Nottingham Public Library.
 Ottawa, Library of Parliament.
 Preston, Public Library.
 Rochester Theological Seminary, *U.S.A.*
 Rugby School Library.
 Sydney Free Library, *New South Wales*.
 Texas University, *Austin, Texas, U.S.A.*
 Worcester Public Library, *Mass., U.S.A.*
-

HON. CORRESPONDING MEMBERS.

HOME.

- 1902 ¶Ball, Sir R. S. LL.D. F.R.S. Prof. of Astronomy, Camb.
The Observatory, Cambridge.
- 1889 ¶Conder, Colonel Claude Reignier, R.E. D.C.L. *Mona, Tivoli Road, Cheltenham.*
- 1890 ¶Geikie, Prof. James, D.C.L. LL.D. F.R.S. F.R.S.E. F.G.S.;
Prof. Geo. and Min. Univ. Edin. Hon. Mem. Phil. Soc.
York, Geo. Soc. Stockholm and Geo. Palæo. Hydrol.
Belg. Memb. Amer. Phil. Soc. Cor. Memb. Acad. Sci.
Phila. 31, *Merchiston Avenue, Edinburgh.*
- 1908 Gill, Sir David, K.C.B. LL.D. F.R.S. 34, *De Vere Gardens, Kensington, W.*
- 1881 ¶Guppy, H. B. Esq. M.B. F.G.S. Mem. Min. Soc. &c. *Rosario, Salcombe, S. Devon.*
- 1903 Howorth, Sir Henry H. K.C.I.E. F.R.S. 30, *Collingham Place, S.W.*
- 1888 ¶Hughes, Prof. T. M'K. M.A. F.R.S. F.S.A. F.G.S.; Wood-
wardian Prof. of Geology, Cambridge, Trin. Coll.
Camb. *Ravensworth, Brooklands Avenue, Cambridge.*
- 1878 MITCHINSON, The Right Rev. J. D.D. D.C.L. Archdeacon
of Leicester, Hon. Fell. Pemb. Coll. Oxf.; Coadj.
Bp. of Peterborough; Hon. Canon of Canterbury.
- 1903 ¶Petrie, Prof. W. Flinders, D.C.L. 18, *Well Road, Hampstead, N.W.*
- 1889*¶Pinches, Theo. G. Esq. LL.D. 38, *Blomfield Road, Maida Hill, W.*
- 1878 ¶Rassam, Hormuzd, Esq. F.R.G.S. 30, *Westbourne Villas, Hove, Brighton.*
- 1889 ¶Sayce, Rev. Prof. A. H. M.A. LL.D. Fellow and Tutor
Queen's Coll. Oxford.
- 1899 Turner, Sir William, V.D. M.B. LL.D. D.C.L. D.Sc. F.R.S.
Prof. Anatomy, Univ. Edin. 6, *Eton Terrace, Edinburgh.*
- 1905 Woodward, Dr. Henry F.R.S. F.G.S. 129, *Beaufort Street, Chelsea.*

FOREIGN.

- 1895 HIS MAJESTY KING MOMOLU MASSAQUOI, West Africa.
- 1881 Abbe, Professor Cleveland, M.A. Assistant in the office of
the Chief Signal Officer of the Weather Bureau, U.S.A.
- 1888 Agassiz, Alexander, Esq. D.C.L. Prof. of Comp. Zoology,
Cambridge, Mass. U.S.A.

- 1895 Hilprecht, Rev. Professor H. V. D.D. *Univ. of Pennsylvania, U.S.A.*
 1893 Hommel, Prof. Fritz, Ph.D. LL.D. Prof. of Semitic Languages in Univ. of Munich, *Leopolds Strasse 81 Munich.*
 1889 d'Hulst, Count Riamo, *Cairo.*
 1895 Lugard, Brigadier-General F. J. D. C.B. D.S.O.
 1896 ¶ Macloskie, Prof. G. D.Sc. LL.D. Prof. Biology (Princeton), U.S.A.
 1883 ¶ Maspero, Prof. G. D.C.L. *Collège de France, Cairo, Egypt; 24, Avenue de l'Observatoire, Paris.*
 1904 Nansen, Prof. Fridtjof, D.Sc. LL.D. D.C.L. *Lysaker, Norway.*
 1883 ¶ Naville, E. D.Lit. Ph.D. *Malagny, Geneva, Switzerland.*
 1895 Sabatier, Professor Armand, M.D. *Montpellier, France.*
 1898 Stosch, Rev. Prof. D.D. 24, *Lutzow Street, Berlin.*
 1904 ¶ Upham, Warren, Esq. M.A. D.Sc. F.G.S. Amer. Sec. Minnesota Historical Society.
 1898 Zahn, Rev. Prof. T. H. *Erlangen.*

SPECIAL.

- 1883 Beckwith, The Right Rev. J. W. D.D. *U.S.A.*
 1878 Haiti, The Right Rev. J. T. Holly, D.D. Bishop of, *Port-au-Prince, Haiti.*
 1884 Herzog, Right Rev. E. D.D. Bishop of the Old Catholic Ch. of Switzerland, *Berne.*
 1878 Jaggard, Right Rev. Bishop T. A. D.D. Bishop of S. Ohio, *Episcopal Rooms, Cincinnati, Ohio, U.S.A.*
 1892 Lucknow, Right Rev. A. Clifford, D.D. Bishop of, *Allahabad, India.*
 1886 Mylne, Right Rev. L. G. D.D. *Alvechurch Rectory, Birmingham.*
 1888 North China, Right Rev. C. P. Scott, Bishop of, *Peking, North China.*
 1890 Ottawa, Right Rev. C. Hamilton, D.D. D.C.L. Bishop of.
 1880 Vail, Right Rev. T. H. D.D. Bishop, *U.S.A.*
 1890 Wakefield, Right Rev. G. R. Eden, D.D. Bishop of.

HON. CORRESPONDENTS.

- Adams, Rev. Richard, M.A. T.C.D. 87 *Burntwood Lane, S.E.*
 Anderson, J. F. Esq. F.R.G.S. *Melrose, Curepipe, Mauritius.*
 Batchelor, W. Esq. 7, *Agnes Road, Northampton.*
 Brants, M. A. Esq. Ph.D. Burgomaster, *Schiedam, Holland.*
 Brown, Rev. J. B. M.A. *St. James' Vicarage, Darwen.*
 Burke, Rev. R. G. M.A. LL.B. *Lilydale Melbourne.*
 Caldecott, Rev. Professor A. M.A. B.D. *Longton Avenue, Sydenham, S.E.*
 Clarke, Rev. J. M. M.A. 2, *Elms Park Terrace, Ramsgate.*
 Corbet, Frederick H. M. Esq. Barrister-at-Law, F.R.C.I. F.I.Inst.
 Hon. Executive Officer for Ceylon at the Imperial
 Institute, 42, *Kenilworth Avenue, Wimbledon.*
 Dallinger, Rev. W. H. D.D. LL.D. F.R.S., *Ingleside, Newstead Road, Lee, S.E.*
 Davis, Rev. W. B. M.A. *Lupton, Torquay.*
 Dixon, Prof. J. M. *Washington Univ. St. Louis, Mo. U.S.A.*
 East, Rev. H. E. *Leithfield, Christchurch, New Zealand.*
 ¶Eells, Rev. M., M.A. *Union City, Mason Co. Washington, D.C., U.S.A.*
 Finn, Mrs. 75, *Brook Green, W.*
 Fleming, Rev. T. S. F.R.G.S. *Boston Spa, Leeds (JF).*
 Foster, Harry S. Esq. J.P. F.R.G.S. Consul for Persia, 82, *Victoria Street, S.W.*
 Gissing, Admiral C. E. R.N. (ret.) F.R.G.S. *United Service Club, S.W.; Homestead, Queen's Park, South Drive, Bournemouth.*
 Gubbins, Surgeon-General W. L. M.D. Army Medical Staff, *War Office, 18, Victoria Street, S.W.; St. John's, Worcester Park, Surrey.*
 †Habershon, M. H. Esq. *Greenhead Cottage, Chapeltown, Sheffield.*
 Harris, A. H. Esq. c/o I.M. Customs, *Shanghai, China.*
 Harrison, Rev. A. J. B.D. LL.D. *Magdalen Lodge, North End, Newcastle.*
 Hassell, Joseph, Esq. *Brittany Lodge, London Road, St. Leonards.*
 Hetherington, Rev. J. *St. Peter's Vicarage, Hull.*
 Hudson, Rev. Canon J. C. M.A. *Thornton Vicarage, Horn-castle.*
 Hutchinson, Rev. A. B. *Fukuoka, Japan.*
 Kydd, Robert, Esq. 164, *Stobcross Street, Glasgow.*
 McLeod, Rev. R. F. *Walsden Vicarage, Todmorden.*
 Nutt, Rev. George, *The Rectory, Lluidas Vale, Jamaica.*
 †Oates, Rev. W. *Somerset East, South Africa.*
 †O'Donel, G. H. Esq. *Mission School, Seoni Chappara, C.P. India.*
 Oliver, Rev. T. D.D. 118, *Hampton Road, Southampton.*

- Painter, Rev. W. Hunt, *Stirchley Rectory, Shifnal, Salop.*
- ¶Parker, Prof. H. W. 47, 7th Avenue, New York, N.Y. U.S.A.
- †Peet, Rev. Stephen D. Ph.D. Editor "American Antiquarian,"
5817 Madison Avenue, Chicago, Ill. U.S.A.
- Petherick, Rev. G. W. B.A. *Hawksleigh, Southport.*
- ¶Post, Rev. Prof. G. E. M.A. M.D. D.D.S. F.L.S. Surgeon
Johanniter Hosp. Syrian Protestant College, Beyrout.
- Postlethwaite, J. Esq. F.G.S. *Chalcedony House, Eskin Place,*
Keswick.
- Ragg, Rev. F. W. M.A. *The Manor House, Lower Boddington,*
Byfield.
- Ramanathan, P. B.A., M.R.A.S., F.R.H.S., *Manónmani Villas,*
Chintadripet, Madras.
- Redman, Rev. J. *Simla, India.*
- †Robertson, Rev. Alex. D.D. *Ca' Straun, Ponte Della Salute, Venice.*
- Ross, Rev. H. D.D. LL.D. F.C.S. Memb. R. Soc. of Arts of Port
Louis, *Dallas House, Lancaster.*
- Shipham, Rev. Arthur, *The Mound, Matlock Bridge.*
- Simpson, Prof. J. Y. M.A. D.Sc. F.R.S.E. *New College, Edinburgh.*
- Stefansson, Jon, Esq. Ph.D.
- Storrs, Rev. W. T. B.D. *Vicarage, Sandown, I.W.*
- †Taylor, Rev. Canon R. *St. Stephen's, Newtown, Sydney, N.S.W.*
- Thomas, Rev. James, British and Foreign Bible Society,
146, *Queen Victoria Street, E.C.*
- ¶Tisdall, Rev. W. St. Clair, M.A. 32, *Kimbolton Road, Bedford.*
- Tyndall, Mrs. *Colepark, Twickenham.*
- Walter, Rev. J. C. B.A. *Langton Rectory, Horncastle.*
- Weidemann, Professor Alfred, Ph.D. 2, *König St. Bonn.*
- Whiteway, Rev. R. W. B. *Beulah House, Selby, Yorks.*
- Williams, W. Esq. Supt. Govt. Telegraphs, India (ret.), *Crofton,*
Combe Park, Bath.
- Willis, R. N. Esq. M.B. 2, *Carlton Terrace, Rathmines, Dublin.*
- Willis, T. Gilbert, Esq. 4, *Kildare Street, Dublin.*
- Winslow, Rev. W. C. Ph.D. D.D. D.C.L. LL.D. D.Sc. 525, *Beacon*
Street, Boston, U.S.A.
- Zwemer, Rev. S. M. M.A. D.D. F.R.G.S. *Bahrein, Persian Gulf.*

MISSIONARY ASSOCIATES.

- Bomford, Rev. Trevor, M.A. *Tarn Taran, Punjab.*
 Byrde, Rev. Louis, B.A., *Nagoya, Japan.*
 Carpentaria, Right Rev. Bishop of, *Thursday Island, Queensland.*
 Carus-Wilson, E., Esq. *Woodlea, Barnet, N.*
 Elwin, Rev. W. H. 7, *Sasujaya Cho, Koishikawa, Tokyo.*
 Joseland, Rev. Frank P. *Amoy, China.*
 Moule, Rev. W. S. B.A. *Ningpo, China.*
 Mylrea, Rev. C. Stanley G. M.D. *Bahrein, Arabia.*
 Reade, Miss F. *Theological Library, Cuddalore, S. India.*
 Robinson, Miss L. G. *Berhampore, Bengal.*
 Turner, Rev. G. Reynolds, M.B. *Hwei-an-hsein, S. China.*
 Woodley, Rev. E. C. *London Mission College, Calcutta.*
-

SOCIETIES EXCHANGING TRANSACTIONS WITH
THE INSTITUTE.

American Academy of Arts and Sciences.
 American Archæological Institute.
 American Geographical Society.
 American Geological Society.
 American Journal of Philology (John Hopkins Press).
 American Philosophical Society.
 Anthropological Society, New York.
 Anthropological Society, Washington.
 Canadian Institute.
 Colonial Museum of New Zealand.
 Geographical Society of the Pacific.
 Geographical Society of California.
 Geological Society.
 Harvard Museum of Comp. Zoology.
 Manitoba Historical and Scientific Society.
 Michigan, Agricultural College of, U.S.
 New Zealand Institute.
 Nova Scotian Inst. of Natural Science.
 Royal Asiatic Society, Bombay.
 Royal Colonial Institute.
 Royal Dublin Society.
 Royal Geographical Society.
 Royal Institution.
 Royal Irish Academy.
 The Royal Society.
 Royal Society of Canada.
 Royal United Service Institution.
 Smithsonian Institution (Washington).
 Société Scientifique du Chili.
 Society of Arts.
 Society of Biblical Literature, U.S.
 Soc. Bib. Lit. and Exeg., Boston.
 Sydney Museum, New South Wales.
 Sydney Observatory, New South Wales.
 United States Bureau of Ethnology.
 United States Geological Survey.
 United States Government Geological and Geographical Survey.
 United States Government Reports.

OBJECTS, CONSTITUTION, AND BYE-LAWS

OF

The Victoria Institute,

OR

Philosophical Society of Great Britain.

Adopted at the First Annual General Meeting of the Members and Associates
May 27th, 1867, with Revisions of 1874-75.

—*—

§ I. *Objects.*

1. THE VICTORIA INSTITUTE, or PHILOSOPHICAL SOCIETY OF GREAT BRITAIN, is established for the purpose of promoting the following objects, viz.:—

First. To investigate fully and impartially the most important questions of Philosophy and Science, but more especially those that bear upon the great truths revealed in Holy Scripture: with the view of reconciling any apparent discrepancies between Christianity and Science.

Second. To associate together men of Science and authors who have already been engaged in such investigations, and all others who may be interested in them, in order to strengthen their efforts by association; and, by bringing together the results of such labours, after full discussion, in the printed transactions of an Institution: to give greater force and influence to proofs and arguments which might be little known, or even disregarded, if put forward merely by individuals.

Third. To consider the mutual bearings of the various scientific conclusions arrived at in the several distinct branches into which Science is now divided, in order to get rid of contradictions and conflicting hypotheses, and thus promote the real advancement of true science; and to examine and discuss all supposed scientific results with reference to final causes, and the more comprehensive and fundamental principles of Philosophy proper, based upon faith in the existence of one Eternal God, who, in His wisdom, created all things very good.

Fourth. To publish Papers read before the Society in furtherance of the above objects, along with full reports of the discussions thereon, in the form of a Journal, or as the Transactions of the Institute.

Fifth. When subjects have been fully discussed, to make the results known by means of Lectures of a more popular kind, and to publish such Lectures.

Sixth. To publish English translations of important foreign works of real scientific and philosophical value, especially those bearing upon the relation between the Scriptures and Science; and to co-operate with other philosophical societies at home and abroad, which are now or may hereafter be formed, in the interest of Scriptural truth and of real science, and generally in furtherance of the objects of this Society.

Seventh. To found a Library and Reading Rooms for the use of the Members and Associates of the Institute, combining the principal advantages of a Literary Club.

§ II. *Constitution.*

1. The Society shall consist of Members and Associates, who in future shall be elected as hereinafter set forth.

2. The government of the Society shall be vested in a Council (whose Members shall be chosen from among the Members and Associates of the Society and be professedly Christians), consisting of a President, two or more (not exceeding seven) Vice-Presidents, a Treasurer, one or more Honorary Secretaries, and twelve or more (not exceeding twenty-four) Ordinary Members of Council, who shall be

elected at the Annual General Meeting of the Members and Associates of the Institute. But, in the interval between two Annual Meetings, vacancies in the Council may be filled up by the Council from among the Members of the Society; and the Members chosen as Trustees of the funds of the Institute shall be *ex officio* Members of Council.

3. Any person desirous of becoming a Member or Associate shall make application for admission by subscribing the Form A of the Appendix, which must be signed by two Members of the Institute, or by a Member of Council, recommending the candidate for admission as a Member; or by any one Member of the Institute, for admission as an Associate.

4. Upon such application being transmitted to one of the Secretaries, the candidate for admission may be elected by the Council, and enrolled as a Member or Associate of the Victoria Institute, in such manner as the Council may deem proper; having recourse to a ballot, if thought necessary, as regards the election of Members; in which case no person shall be considered as elected unless he have three-fourths of the votes in his favour.

5. Application for admission to join the Institute being thus made by subscribing Form A, as before prescribed, such application shall be considered as *ipso facto* pledging all who are thereupon admitted as Members or Associates to observe the Rules and Bye-Laws of the Society, and as indicative of their desire and intention to further its objects and interests; and it is also to be understood that only such as are professedly Christians are entitled to become *Members*.

6. Each Member shall pay an Entrance Fee of One Guinea and an Annual Contribution of Two Guineas. A Donation of Twenty Guineas shall constitute the donor a Life Member.

7. Each Associate shall pay an Annual Contribution of One Guinea. A donation of Ten Guineas shall constitute the donor a Life Associate.

8. The Annual Contributions shall be considered as due in advance on the 1st day of January in each year, and shall be paid within three months after that date; or, in the case of new admissions within three months after election.

9. Any Member or Associate who contributes a donation in one sum of not less than Sixty Guineas to the funds of the Institute shall be

enrolled as a Vice-Patron thereof, and will thus also become a Life Member or Life Associate, as the case may be.

10. Should any member of the Royal Family hereafter become the Patron, or a Vice-Patron, or Member of the Institute, the connexion shall be regarded as purely Honorary ; and none of the Rules and Bye-Laws relating to donations, annual contributions or obligations to serve in any office of the Society, shall be considered as applicable to such personages of Royal Blood.

11. Any Member or Associate may withdraw from the Society at any time, by signifying a desire to do so by letter, addressed to one of the Secretaries ; but such shall be liable for the contribution of the current year, and shall continue liable for the annual contribution, until all sums due to the Society from such Member or Associate shall have been paid, and all books or other property borrowed from the Society shall have been returned or replaced.

12. Should there appear cause, in the opinion of the Council, for the exclusion from the Society of any Member or Associate, a private intimation may be made by direction of the Council, in order to give such Member or Associate an opportunity of withdrawing from the Society ; but, if deemed necessary by the Council, a Special General Meeting of Members shall be called for the purpose of considering the propriety of expelling any such person : whereat, if eleven or more Members shall ballot, and a majority of those balloting shall vote that such person be expelled, he shall be expelled accordingly. One month's notice, at least, shall be given to the Members of any such Special General Meeting.

13. Non-resident Members and Associates, or others desirous of promoting the objects and interests of the Institute, may be elected by the Council to act as corresponding Members abroad, or as Honorary Local Secretaries, if within the United Kingdom, under such arrangements as the Council may deem advisable.

14. The whole property and effects of the Society shall be vested in two or more Trustees, who shall be chosen at a General Meeting of the Society. The Trustees are empowered to invest such sums as the Council may, from time to time, place in their hands, in, or upon any of the Stocks, Funds, or Securities, for the time being, authorised by statute for the investment of trust funds by trustees, and shall have the usual powers of trustees in regard thereto. [The President, Hon. Treasurer, and Hon.

Secretary may officially give effect to such resolutions as a General Meeting may pass in regard thereto.]

14a. All moneys received on account of the Institute shall be duly paid to its credit at the Bankers, and all cheques shall be drawn, under authority of the Council, and shall be signed by the Honorary Treasurer and Honorary Secretary.

15. The accounts shall be audited annually, by a Committee, consisting of two Members,—one of whom may be on the Council,—to be elected at an Ordinary Meeting of the Society preceding the Anniversary Meeting. This Committee shall make a written Report to the Council at the first Meeting after such audit, and also to the Institute, upon the day of the Annual General Meeting,—stating the balance in the Treasurer's hands and the general state of the funds of the Institute.

16. Both Members and Associates shall have the right to be present to state their opinion, and to vote by show of hands at all General and Ordinary Meetings of the Society; but Members only shall be entitled to vote by ballot, when a ballot is taken in order to determine any question at a General Meeting.

§ III. *Bye-Laws* (Privileges).

1. A Member or Associate, when elected, shall be so informed by the Secretary in a printed copy of the letters, Form B, in the Appendix.

2. Members and Associates shall not be entitled to any privileges, or have the right to be present, or to vote at any of the Meetings of the Society, till they have paid the contributions due by them.

3. Annual subscriptions shall be considered as in arrear, if not paid on or before 31st March in each year, or within three months after election, as the case may be.

4. Should any annual subscription remain in arrear to the 30th June, or for six months after election, the Treasurer shall cause to be forwarded to the Member or Associate from whom the subscription is due, a letter, Form D, in the Appendix, unless such Member or Associate reside out of the United Kingdom; in which case the Form D shall not be sent unless the subscription continues unpaid till the 30th September.

5. If any arrears be not paid within twelve months, the Council shall

use their discretion in erasing the name of the defaulter from the list of Members or Associates.

6. Members shall be entitled to introduce two Visitors at the Ordinary Meetings of the Society; and to have sent to them a copy of all the Papers read before the Society, which may be printed in its Transactions or otherwise, and of all other official documents which the Council may cause to be printed for the Society; they will also be entitled to a copy of all such translations of foreign works or other books as are published under the auspices of the Society in furtherance of Object 6 (§ I.).

7. Associates may introduce two Visitors at the Ordinary Meetings, and shall be entitled to all the minor publications of the Society, and to a copy of its Transactions during the period of their being Associates, but not to the translations of foreign works or other books above referred to.* It shall, however, be competent to the Council of the Society, when its funds will admit of it, to issue the other publications of the Society to Associates, being ministers of religion, either gratuitously or at as small a charge as the Council may deem proper.

8. When it shall be found necessary to send the letter, Form D, to any Member or Associate who may be in arrear, the printed papers and other publications of the Society shall cease to be sent to such Member or Associate till the arrears are paid; and, until then, he shall not be allowed to attend any Meeting of the Society, nor have access to any public rooms which may be in its occupation.

9. The Library† shall be under the management and direction of the Council, who are empowered to designate such works as shall not be allowed to circulate.

10. Each Member‡ shall be allowed to borrow books from the Library, and to have not more than three volumes in his possession at the same time; pamphlets and periodical publications not to be kept above fourteen days, nor any other book above three weeks.

11. Members who may borrow books from the Library shall be answerable for the full value of any work that is lost or injured.

* These, as well as the Transactions issued in the years previous to their joining, may be purchased at half price.

† For the use of Members and Associates.—*See 7th Object.*

‡ Members only are allowed to take books away.

12. Periodical publications shall remain on the table for a month other books for a fortnight, after they are received.

13. When a book or pamphlet is wanted, and has been the stipulated time in the possession of any Member, the Secretary shall request its return, and a fine of threepence a day shall be incurred for every day it may be detained, which fine shall commence on the third day after the transmission of the notice in the case of town Members, and after the sixth day in the case of country Members ; and until the return of such works, and the discharge of all fines incurred, no further issue of books shall be permitted to the Member applied to.

14. The books shall be ordered in for inspection at such times as the Council shall appoint, and a fine of half-a-crown shall be incurred for neglecting to send in books by the time required in the notice.

15. A book shall lie on the Library table in which Members may insert, for the consideration of the Council, the titles of such works as they desire to be purchased for the Institute.

§ IV. *Bye-Laws* (General, Ordinary, and Intermediate Meeting).

1. A General Meeting of Members and Associates shall be held annually on 24th May (being Her late Majesty's birthday, and the Society's anniversary), or on the Monday following, or on such other day as the Council may determine as most convenient, to receive the Report of the Council on the state of the Society, and to deliberate thereon ; and to discuss and determine such matters as may be brought forward relative to the affairs of the Society ; also, to elect the Council and Officers for the ensuing year.

2. The Council shall call a Special General Meeting of the Members and Associates, when it seems to them necessary, or when required to do so by requisition, signed by not less than ten Members and Associates, specifying the question intended to be submitted to such Meeting. Two weeks' notice must be given of any such Special General Meeting ; and only the subjects of which notice has been given shall be discussed thereat.

3. The Ordinary Meetings of the Society shall usually be held on the first and the Intermediate Meetings on the third Monday evenings in each month, from November to June inclusive or on such other evenings

as the Council may determine to be convenient : and a printed card of the Meetings for each Session shall be forwarded to each Member and Associate.

4. At the Ordinary and Intermediate Meetings the order of proceeding shall be as follows : The President, or one of the Vice-Presidents, or a Member of the Council, shall take the chair at 4.30 o'clock precisely, the minutes of the last Ordinary or Intermediate Meeting shall be read aloud by one of the Secretaries, and, if found correct, shall be signed by the Chairman ; the names of new Members and Associates shall be read ; the presents made to the Society since their last Meeting shall be announced ; and any other communications which the Council think desirable shall be made to the Meeting. After which, the Paper or Papers intended for the evening's discussion shall be announced and read, and the persons present shall be invited by the Chairman to make any observations thereon which they may wish to offer.

The claims of Members and Associates to take part in a discussion are prior to those of Visitors. The latter when desiring to speak upon any Paper, must first send their cards to the Chairman and ask permission (unless they have been specially invited by the Council "to attend, and join in considering the subject before the Meeting," or are called upon by the Chairman). 1875.

5. The Papers read before the Society, and the discussions thereon fully reported, shall be printed by order of the Council ; or, if not, the Council shall, if they see fit, state the grounds upon which this Rule has been departed from, in the printed Journal or Transactions of the Society.

6. The Council may at their discretion authorise Papers of a general kind to be read at any of the Ordinary or Intermediate Meetings, either as introductory lectures upon subjects proper to be afterwards discussed, or as the results of discussions which have taken place, in furtherance of the 5th Object of the Society (§ I.).

7. With respect to Intermediate Meetings, the Papers read at which are not necessarily printed nor the discussions reported,* the Council at its discretion may request any lecturer or author of a Paper to be read thereat, previously to submit an outline of the proposed method of treating his subject.

* So arranged when the "Intermediate Meetings" were commenced, 16th January, 1871.

8. At the Ordinary or Intermediate Meetings no question relating to the Rules or General Management of the affairs of the Society shall be introduced, discussed or determined.

§ V. *Bye-Laws* (Council Meetings).

1. The Council shall meet at least once every month from November to June inclusive, or at any other time and on such days as they may deem expedient. The President, or any three Members of the Council, may at any time call a Special Meeting, to which the whole Council shall be summoned.

2. At Council Meetings three shall be a quorum ; the decision of the majority shall be considered as the decision of the Meeting, and the Chairman shall have a casting vote.

3. Minutes of the Proceedings shall be taken by one of the Secretaries, or, in case of his absence, by some other Member present, whom the Chairman may appoint ; which Minutes shall afterwards be entered in a minute-book kept for that purpose, and read at the next Meeting of the Council, when, if found correct, they shall be signed by the Chairman.

§ VI. *Bye-Laws* (Papers).

1. Papers presented to be read before the Society shall, when read, be considered as the property of the Society, unless there shall have been any previous engagement with its author to the contrary ; and the Council may cause the same to be published in any way and at any time they may think proper after having been read. If a Paper be not read, it shall be returned to the author ; and, if a Paper be not published within a reasonable time after having been read, the author shall be entitled himself to publish it, and he may borrow it for that purpose.

2. When a Paper is sent to the Society for the purpose of being read, it shall be laid before the Council, who shall refer it to two of that body, or of the other Members or Associates of the Society whom they may select, for their opinions as to the character of the Paper and its fitness or otherwise for being read before the Society, which they shall state as briefly as may be, in writing, along with the grounds of their respective opinions. Should one of such opinions be adverse to the Paper and against its being read before the Society, then it shall be referred to some other referee, who is unaware of the opinion already pronounced upon the Paper, in order that he may state his opinion upon it in like manner. Should this opinion be adverse to the Paper, the Council shall then

consult and decide whether the Paper shall be rejected or read ; and, if rejected, the Paper shall be returned to the author with an intimation of the purport of the adverse opinions which have been given with respect to it ; but the names of the referees are not to be communicated to him, unless with their consent or by order of the Council. All such references and communications are to be regarded as confidential, except in so far as the Council may please to direct otherwise.

3. The Council may authorise Papers to be read without such previous reference for an opinion thereon ; and when a Paper has been referred, and the opinion is in favour of its being read in whole or in part, the Council shall then cause it to be placed in the List of Papers to be so read accordingly, and the author shall receive due notice of the evening fixed for its reading.

4. The authors of Papers read before the Society shall, if they desire it, be presented with twenty-five separate copies of their Paper, with the discussion thereon, or with such other number as may be determined upon by the Council.

§ VII. *Bye-Laws* (General).

1. The government of the Society, and the management of its concerns are entrusted to the Council, subject to no other restrictions than are herein imposed, and to no other interference than may arise from the acts of Members in General Meeting assembled.

2. With respect to the duties of the President, Vice-Presidents, and other Officers and Members of Council, and any other matters not herein specially provided for, the Council may make such regulations and arrangements as they deem proper, and as shall appear to them most conducive to the good government and management of the Society, and the promotion of its objects. And the Council may hire apartments, and appoint persons not being Members of the Council, nor Members or Associates of the Institute, to be salaried officers, clerks, or servants, for carrying on the necessary business of the Society ; and may allow them respectively such salaries, gratuities, and privileges, as to them, the Council, may seem proper ; and they may suspend any such officer, clerk or servant from his office and duties, whenever there shall seem to them occasion ; provided always, that every such appointment or suspension shall be reported by the Council to the next ensuing General Meeting of the Members to be then confirmed or otherwise as such Meeting may think fit.

FORM A.

FORM OF APPLICATION for the Admission of Vice-Patrons, Members, or Associates of the
VICTORIA INSTITUTE.

I hereby desire to be enrolled a *

INSTITUTE, OR PHILOSOPHICAL SOCIETY OF GREAT BRITAIN,

* Here insert
Vice-Patron,

or

Member,

or

Life Member,

or

Associate,

or

Life Associate.

Candidate's ordinary Signature, and full
name, if necessary.

Title, Profession, University degree, &c.,
or other distinction.

Address

If an Author, the name of the Candidate's
works may be here stated.

[Date] _____ 19

of the VICTORIA

When filled this form is to be sent to the

Honorary Secretary of the VICTORIA INSTITUTE,

1, Adelphi Terrace House, Strand, London, W.C.

FORM B.

SIR,

19 .

I have the pleasure to inform you, with reference to your application dated the _____, that you have duly been elected a _____ of the VICTORIA INSTITUTE, OR PHILOSOPHICAL SOCIETY OF GREAT BRITAIN.

I have the honour to be, Sir,
Your faithful Servant,

To _____

Sec.

FORM C.

(Bankers) Messrs. _____

* Please pay Messrs. BARCLAY & Co., 1, Pall Mall East, S.W., my Annual Contribution of TWO GUINEAS to the VICTORIA INSTITUTE, due on the 1st of January, 19 _____, and the same amount on that day in every succeeding year, until further notice.

I am,

Your obedient Servant,

_____ 19 .

If this Form be used, please add your Signature, Banker's Name, and the Date, and return it to the Office, 1, Adelphi Terrace House, W.C. Receipt-stamp required.

* The above is the form for Members. The form for Associates is the same except that the Subscription stands as "ONE GUINEA."

THE JOURNAL OF THE TRANSACTIONS

ISSUED DURING PAST YEARS.

Since the Inauguration of the Society, the following Papers have been read :—
The Quarterly Parts of the Journal are indicated by the numbers prefixed. (*The volumes are sold at One Guinea to Non-Members; Half-a-Guinea to Members and Associates; those issued during the years of subscription are not charged for.*)

FIRST SERIES VOLS. 1 TO 5.

VOL. I.

1. A Sketch of the Existing Relations between Scripture and Science. By the late GEORGE WARINGTON, Esq., F.C.S.
2. On the Difference in Scope between Scripture and Science. By the late C. MOUNTFORD BURNETT, Esq., M.D., Vice-President V.I.
On Comparative Philology. By the Rev. ROBINSON THORNTON, D.D., Vice-President V.I.
On the Various Theories of Man's Past and Present Condition. By the late JAMES REDDIE, Esq., Hon. Sec. V.I.
3. On the Language of Gesticulation and Origin of Speech. By Professor J. R. YOUNG.
On Miracles: their Compatibility with Philosophical Principles. By the Rev. W. W. ENGLISH, M.A.
Thoughts on Miracles. By the late E. B. PENNY, Esq.
On the General Character of Geological Formations. By the late E. HOPKINS, Esq., C.E.
4. On the Past and Present Relations of Geological Science to the Sacred Scriptures. By the Rev. Professor JOHN KIRK.
On the Lessons taught us by Geology in relation to God. Rev. J. BRODIE, M.A.
On the Mutual Helpfulness of Theology and Natural Science. By Dr. GLADSTONE, F.R.S.
On Falling Stars and Meteorites. By the late Rev. W. MITCHELL, M.A., Vice-President V.I.
(*The above Papers, with the Discussions thereon, and with "Scientia Scientiarum: being some Account of the Origin and Objects of the Victoria Institute," with the Reports of the Provisional Proceedings, and the Inaugural Address by the late Rev. Walter Mitchell, M.A., Vice-President, form Vol. I. of the "Journal."*)

VOL. II.

5. { On the Terrestrial Changes and Probable Ages of the Continents, founded upon Astro-
nomical Data and Geological Facts. By the late EVAN HOPKINS, Esq., C.E., F.G.S.
On the Credibility of Darwinism. By the late GEORGE WARINGTON, Esq., F.C.S.
On the Credibility of Darwinism. By the late JAMES REDDIE, Esq., Hon. Sec. V.I.
6. { On Utilitarianism. By the late JAMES REDDIE, Esq., Hon. Sec. V.I.
On the Logic of Scepticism. By the Rev. ROBINSON THORNTON, D.D., V.P.
Annual Address (On the Institute's Work). By the late JAMES REDDIE, Esq., Hon. Sec. V.I.
7. { On the Relations of Metaphysical and Physical Science to the Christian Doctrine of
Prayer. By the Rev. Professor JOHN KIRK.
On Geological Chronology, and the Cogency of the Arguments by which some Scientific
Doctrines are supported. (In reply to Professor Huxley's Address delivered at Sion
College on 21st Nov., 1867.) By the late J. REDDIE, Esq., Hon. Sec. V.I. (1867-68).
8. { On the Geometrical Isomorphism of Crystals, and the Derivation of all other Forms from
those of the Cubical System. (6 Plates.) By the late Rev. W. MITCHELL, M.A., V.P.

VOL. III.

9. On the Antiquity of Civilisation. By the late Bishop TITCOMB, D.D.
 On Life, with some Observations on its Origin. By J. H. WHEATLEY, Esq., Ph.D.
 On the Unphilosophical Character of some Objections to the Divine Inspiration of Scripture. By the late Rev. WALTER MITCHELL, M.A.
 On Comparative Psychology. By E. J. MORSHEAD, Esq., Hon. For. Sec. V.I.
10. On Theology as a Science. By the late Rev. A. DE LA MARE, M.A.
 On the Immediate Derivation of Science from the Great First Cause. By R. LAMING, Esq.
 On some of the Philosophical Principles contained in Mr. Buckle's "History of Civilisation," in reference to the Laws of the Moral and Religious Developments of Man. By the Rev. Prebendary C. A. ROW, M.A.
 On the Nature of Human Language, the Necessities of Scientific Phraseology, and the Application of the Principles of both to the Interpretation of Holy Scripture. By the Rev. J. BAYLEE, D.D.
11. On the Common Origin of the American Races with those of the Old World. By the late Bishop TITCOMB, D.D.
 On the Simplification of first Principles in Physical Science. By the late C. BROOKE, F.R.S.
 On the Biblical Cosmogony scientifically considered. By late G. WARINGTON, Esq., F.C.S.
 On Ethical Philosophy. By the Rev. W. W. ENGLISH, M.A.
12. On some Uses of Sacred Primeval History. By the late D. McCausland, Esq., Q.C., LL.D.
 On the Relation of Reason to Philosophy, Theology, and Revelation. By the Rev. Preb. C. A. ROW, M.A.

VOL. IV.

13. { Analysis of Human Responsibility. By the late Prebendary IRONS, D.D. (And part 16.)
 On the Doctrine of Creation according to Darwin, Agassiz, and Moses. By Prof. KIRK.
14. { On the Noachian Deluge. By the Rev. M. DAVISON.
 On Life—Its Origin. By J. H. WHEATLEY, Esq., Ph.D.
 On Man's Place in Creation. By the late Professor MACDONALD, M.D.
15. { On More than One Universal Deluge recorded in Scripture. By late Rev. H. MOULE, M.A.
 On Certain Analogies between the Methods of Deity in Nature and Revelation. By the Rev. G. HENSLOW, M.A., F.L.S.
 On the Respective Provinces of the Observer and the Reasoner in Scientific Investigation. By the Rev. EDWARD GABBETT, M.A.
 On the Credulity of Scepticism. By the Rev. R. THORNTON, D.D., V.P.
16. { On Current Physical Astronomy. By the late J. REDDIE, Esq., Hon. Sec. V.I.
 Analysis of Human Responsibility. By the late Preb. IRONS, D.D. (See part 13.) *Concluded.*

VOL. V.

19. On the Origin of the Negro. By the late Bishop TITCOMB, D.D.
 On the Testimony of Philosophy to Christianity as a Moral and Spiritual Revelation. By the Rev. Preb. C. A. ROW, M.A.
 On the Numerical System of the Old Testament. By the Rev. Dr. THORNTON, V.P.
18. On Spontaneous Generation; or, the Problem of Life. By the Rev. Prof. KIRK.
 A Demonstration of the Existence of God. By the Rev. J. McCANN, D.D.
 Why Man must Believe in God. By the late JAMES REDDIE, Esq., Hon. Sec. V.I.
19. On Geological Proofs of Divine Action. By S. R. PATISON, Esq., F.G.S.
 On True Anthropology. By W. HITCHMAN, Esq., M.D.
 On Comparative Psychology. (Second Paper.) By E. J. MORSHEAD, Esq., Hon. For. Sec. V.I.
20. On the High Numbers in the Pentateuch. By P. H. GOSSE, Esq., F.R.S., V.P.
 Israel in Egypt. By the late Rev. H. MOULE, M.A.

NEW SERIES.

BEING THE VOLUMES CONTAINING THE MORE MODERN PAPERS.

VOL. VI. IS THE FIRST OF THIS SERIES.

21. { On Civilisation, Moral and Material. (Also in Reply to Sir John Lubbock on "Primitive Man.") By the late J. REDDIE, Esq., Hon. Sec. V.I.
22. { On Dr. Newman's "Essay in Aid of a Grammar of Assent." By the Rev. Preb. Row, M.A.
22. { On the Evidence of the Egyptian Monuments to the Sojourn of Israel in Egypt. By the Rev. B. W. SAYILE, M.A.
22. { On the Moabite Stone. By Captain F. PETRIE, Hon. Sec.
22. { On Phyllotaxis; or, the Arrangement of Leaves in Accordance with Mathematical Laws. By the Rev. G. HENSLOW, M.A., F.L.S.
22. { On Prehistoric Monotheism, considered in relation to Man as an Aboriginal Savage. By the late Bishop TITCOMB, D.D.
23. { On Biblical Pneumatology and Psychology. By the Rev. W. W. ENGLISH, M.A.
23. { On Some Scriptural Aspects of Man's Tripartite Nature. By the Rev. C. GRAHAM.
23. { On Ethnic Testimonies to the Pentateuch. By the late Bishop TITCOMB, D.D.
24. { On the Darwinian Theory. By the late Prebendary IRONS, D.D.
24. { Serpent Myths of Ancient Egypt. By the late W. R. COOPER, Esq., F.R.A.S., M.R.A.S., Sec. Soc. Biblical Archæology. 129 Illustrations.

VOL. VII.

25. { On Natural Theology, considered with respect to Modern Philosophy. By the Rev. G. HENSLOW, M.A., F.L.S.
25. { On Fatalism. Contributed by the Rev. J. ROBBINS, D.D.
26. { On Darwinism Tested by Recent Researches in Language. By F. BATEMAN, Esq., M.D., &c.
26. { On Force and its Manifestations. By the Rev. J. McCANN, D.D.
26. { On Professor Tyndall's "Fragments of Science for Unscientific People." By the late Prebendary IRONS, D.D.
26. { On the Origin of the Moral Sense. By the Rev. Professor KIRK.
26. { On Force and Energy. By the late CHARLES BROOKE, Esq., M.A., F.R.S.
27. { On Darwinism and its Effects upon Religious Thought. By C. R. BREE, Esq., M.D., &c.
27. { Remarks on Some of the Current Principles of Historic Criticism. By Rev. Preb. Row, M.A.
27. { On "Scientific Facts and Christian Evidence." By the late J. E. HOWARD, Esq., F.R.S., F.L.S.
28. { On the "Law of Creation—Unity of Plan, Variety of Form." By Rev. G. W. WELDON, M.A.
28. { Some Remarks on the Present Aspect of Inquiries as to the Introduction of Genera and Species in Geological Time. By V.-Chancellor J. W. DAWSON, C.M.G., LL.D., F.R.S.

VOL. VIII.

29. The Palæolithic Age Examined. By N. WHITLEY, Esq.
29. (Annual Address.) On the Moral and Social Anarchy of Modern Unbelief. By the late Principal T. P. BOULTEE, LL.D.
30. On the Identity of Reason in Science and Religion. Rev. R. MITCHELL.
30. On Buddhism. By the Right Rev. Bishop PIERS C. CLAUGHTON, D.D., &c., with communications from Professors CHANDLER and BREWER.
30. On the Contrast between Crystallisation and Life. By the late J. E. HOWARD, Esq., F.R.S.
31. On the Brixham Cavern and its Testimony to the Antiquity of Man—examined. By N. WHITLEY, Esq., Sec. Royal Inst. of Cornwall.
31. On the Rules of Evidence as applicable to the Credibility of History. By W. FORSYTH, Esq., Q.C., LL.D., Vice-President.
31. On the Principles of Modern Pantheistic and Atheistic Philosophy as expressed in the last work of Strauss, Mill, &c. By the Rev. Prebendary C. A. Row, M.A. Paper on the same, by late Prof. CHALLIS, M.A., F.R.S., F.R.A.S.
32. On Prehistoric Traditions and Customs in Connexion with Sun and Serpent Worship. By J. S. PHENE, Esq., LL.D., F.S.A., with Illustrations.

VOL. IX.

33. On the Varying Tactics of Scepticism. (Annual Address.) By the Rev. ROBINSON THORNTON, D.D., Vice-President.
 On the Harmony between the Chronology of Egypt and the Bible. By the Rev. B. W. SAVILE, M.A.
34. On the Ethical Condition of the Early Scandinavian Peoples. By E. W. GOSSE, Esq.
 On Magnitudes in Creation and their Bearings on Biblical Interpretation. By the late Bishop TITCOMB, D.D. Paper on the same, by late Prof. CHALLIS, M.A., F.R.S., F.R.A.S.; with communications from the Astronomer Royal's Department, the Radcliffe Observer, and Professor PRITCHARD, F.R.S.
- On Biblical Interpretation in connexion with Science. By the Rev. A. I. McCAUL, M.A. (King's College), with a communication by V.-Chancellor J. W. DAWSON, C.M.G., LL.D., F.R.S.
- On the Final Cause as Principle of Cognition and Principle in Nature. By Professor G. S. MORRIS, of Baltimore University, U.S.
35. On the Bearing of certain Palæontological Facts upon the Darwinian Theory of the Origin of Species, and of Evolution in General. By Professor H. A. NICHOLSON, M.D., D.Sc., F.R.S.E., &c.
- On the Early Dawn of Civilisation, considered in the Light of Scripture. By the late J. E. HOWARD, Esq., F.R.S.
- On the Indestructibility of Force. By the late Professor BIRKS, M.A.
36. On Mr. Mill's Essays on Theism. By the late Preb. W. J. IRONS, D.D.

VOL. X.

37. On the Chronology of Recent Geology. By S. R. PATTISON, Esq., F.G.S.
 On the Nature and Character of Evidence for Scientific Purposes. By the Rev. J. M'CANN, D.D.
 The Relation of the Scripture Account of the Deluge to Physical Science. By the late Prof. CHALLIS, M.A., F.R.S., F.R.A.S.
38. An Examination of the Belfast Address from a Scientific point of view. By the late J. E. HOWARD, Esq., F.R.S.
 Annual Address; Modern Philosophic Scepticism examined. By the late Rev. R. MAIN, F.R.S., V.P.R.A.S., *The Radcliffe Observer*.
- On the Etruscan Language. By the Rev. ISAAC TAYLOR, M.A.
39. On "Present Day Materialism." By the Rev. J. McDOUGALL.
 On the Sorrows of Scepticism. By Rev. R. THORNTON, D.D., Vice-Pres. (see parts 6, 15, 33.)
 On Heathen Cosmogonies, compared with the Hebrew. By Rev. B. W. SAVILE, M.A.
 On the Place of Science in Education. By Professor H. A. NICHOLSON, M.D., D.Sc., F.R.S.E.
40. On Egypt and the Bible. By the late J. E. HOWARD, Esq., F.R.S.

VOL. XI.

41. The Flint "Implements" of Brixham Cavern. By N. WHITLEY, Esq. (*Photographically illustrated*).
 On the Flint Agricultural Implements of America. By Dr. J. W. DAWSON, C.M.G., F.R.S.
 An Examination of "The Unseen Universe." By the late Preb. IRONS, D.D.
 The Uncertainties of Modern Physical Science. By the late Professor BIRKS, M.A.
 The Ethics of Belief. By Principal H. WACE, D.D.
42. On the Metaphysics of Scripture. By the late Prof. CHALLIS, M.A., F.R.S., F.R.A.S.
 On the Theory of Unconscious Intelligence as opposed to Theism. By Prof. MORRIS, U.S.A.
 On the Myth of Ra. By the late W. R. COOPER, Esq., F.R.A.S., Sec. Soc. Bib. Arch.
 On Christianity as a Moral Power. By Professor LIAS, Hulsean Lecturer, Cambridge.
43. On the Structure of Geological Formations as Evidence of Design. By D. HOWARD, F.C.S.
 On the Bible and Modern Astronomy. By the late Prof. BIRKS, M.A. (Camb.)
44. On Comparative Psychology. By E. J. MORSHEAD, Esq.

VOL. XII.

45. On the Indestructibility of Matter. By the late Professor CHALLIS, M.A., F.R.S., F.R.A.S.
 On History in the Time of Abraham, Illustrated by Recent Researches. By Rev. H. G. TOMKINS. With Numerous Notes by Various Assyriologists.
 On the Horus Myth. By the late W. R. COOPER, Esq., F.R.A.S., M.R.A.S., Sec. Soc. Bib. Arch. (*Illustrated*). Additional Papers by various Egyptologists.
46. The Influence of True and False Philosophy. (Ann. Address.) The late J. E. HOWARD, F.R.S.
 The History of the Alphabet. By Rev. ISAAC TAYLOR, M.A.
 Creation and Providence. By the late J. E. HOWARD, Esq., F.R.S.
 Nature's Limits: an Argument for Theism. By S. R. PATTISON, Esq., F.G.S.
 Mr Matthew Arnold and Modern Culture. Prof. LIAS, Hulsean Lecturer, Cambridge.

47. On the Relation of Scientific Thought to Religion. The Right Rev. Bishop COTTERILL, D. D. Monotheism. By the Rev. Dr. RULÉ (Author of "Oriental Records").
48. Physical Geography of the East. By the late J. L. PORTER, D.D., D.C.I.

VOL. XIII.

49. { Modern Geogenies and the Antiquity of Man. Late Prof. BIRKS, M.A.
The Annual Address. Rev. Principal RIGG, D.D.
50. { "On Science and Man." By Dr. NOAH PORTER (President of Yale, United States).
"The Lapse of Time since the Glacial Epoch determined by the Date of the Polished Stone Age." By Dr. SOUTHALL (United States).
"Final Cause: a Critique of the Failure of Paley and the Fallacy of Hume." By the late J. P. THOMPSON, D.D., LL.D. (Harvard, U.S.).
51. { "The Torquay Caves and their Teachings." By the late J. E. HOWARD, Esq., F.R.S.
"Does the Contemporaneity of Man with the Extinct Mammalia, as shown by Recent Cavern Exploration, prove the Antiquity of Man?" By T. K. CALLARD, Esq., F.G.S., &c.; with special additional communications by Professor BOYD-DAWKINS, F.R.S., Rev. J. M. MELLO, M.A., F.G.S. (Creswell), &c.
"The System of Zoroaster considered in connexion with Archaic Monotheism." By R. BROWN, Esq., F.S.A.
52. { "On the Evidence already obtained as to the Antiquity of Man." By Professor T. McK. HUGHES, M.A. (Woodwardian Professor of Geology at Cambridge University); with additions by the DUKE OF ARGYLL, K.G., Professor BOYD-DAWKINS, F.R.S., and other Geologists.

VOL. XIV.

3. { "The Topography of the Sinaitic Peninsula" (giving results of last survey). By (the late) Rev. F. W. HOLLAND, M.A. (Palestine Exploration Fund); with a new map.
"The Ethnology of the Pacific." By the Rev. S. J. WHITMEE, F.L.S.; with a large new map, showing the distribution of Races and all the results of the latest discoveries.
The Annual Meeting.
54. { On Physiological Metaphysics. By Professor NOAH PORTER (President, Yale Univ., U.S.).
On the Druids and their Religion. By the late J. E. HOWARD, Esq., F.R.S.
On the Organ of Mind. By Rev. J. FISHER, D.D. (the late).
On the Data of Ethics. By Principal WACE, D.D.
55. { On the Bearings of the Study of Natural Science, and of the Contemplation of the Discoveries to which that Study leads, on our Religious Ideas. By Professor STOKES, P.R.S. (Lucasian Professor of Mathematics, Cambridge).
Late Assyrian and Babylonian Research. By HORMUZD RASSAM, Esq.
On the Evidence of the Later Movements of Elevation and Depression in the British Isles. By Professor HUGHES, M.A. (Woodwardian Professor of Geology at Cambridge).
On the Nature of Life. By Professor H. A. NICHOLSON, M.D., F.R.S.E., Aberdeen.
56. { On the Religion and Mythology of the Aryans of Northern Europe. By R. BROWN, F.S.A.

VOL. XV.

57. { The Life of Joseph. Illustrated from Sources External to Holy Scripture. By Rev. H. G. TOMKINS.
On the Relation between Science and Religion, through the Principles of Unity, Order, and Causation. Annual Address by the Right Rev. Bishop COTTERILL, D.D. (the late).
Some Considerations on the Action of Will in the Formation and Regulation of the Universe—being an Examination and Refutation of certain Arguments against the existence of a personal conscious Deity. By (the late) Lord O'NEILL.
58. { On the Modern Science of Religion, with Special Reference to those parts of Prof. Max Müller's "Chips from a German Workshop," which treat thereon. Rev. G. BLENCOWE.
On the Early Destinies of Man. By (the late) J. E. HOWARD, Esq., F.R.S.
Pliocene Man in America. By Dr. SOUTHALL (United States); a second paper on the same, by Sir J. W. DAWSON, C.M.G., LL.D., F.R.S., of McGill College, Montreal; and communications from the Duke of ARGYLL, K.G.; Professor W. BOYD-DAWKINS, F.R.S.; Professor T. McK. HUGHES (Woodwardian Professor of Geology at Cambridge), and others.
59. { Scientific Facts and the Caves of South Devon. By (the late) J. E. HOWARD, Esq., F.R.S.
Implements of the Stone Age as a primitive Demarcation between Man and other Animals. By (the late) J. P. THOMPSON, D.D., LL.D.
Meteorology: Rainfall. By J. F. BATEMAN, Esq., F.R.S., F.R.S.E.
On the Rainfall and Climate of India. By Sir JOSEPH FAYER, K.C.S.I., M.D., F.R.S., with a new Map, showing the Physical Geography and Meteorology of India, by TRELAWNEY W. SAUNDERS, Esq.
60. { Language and the Theories of its Origin. By R. BROWN, Esq., F.S.A.

VOL. XVI.

61. The Credibility of the Supernatural. (Annual Address.) By (the late) Lord O'NEILL.
 Supposed Palæolithic Tools of the Valley of the Axe. By N. WHITLEY, Esq. (Engravings.)
 An Examination of the Philosophy of Mr. Herbert Spencer. By the Rev. W. D. GROUND.
62. On Herbert Spencer's Theory of the Will. By Rev. W. D. GROUND; with Communication.
 Biblical Proper Names, personal and local, illustrated from sources external to Holy Scripture.
 By Rev. H. G. TOMKINS. Comments by Professor MASPERO, Mr. RASSAM, and others.
 Breaks in the Continuity of Mammalian Life at certain Geological Periods, fatal to the
 Darwinian Theory of Evolution. By (the late) T. K. CALLARD, Esq., F.G.S., with
 Comments by several Geologists.
 The New Materialism Unscientific; or, Dictatorial Scientific Utterances and the Decline of
 Thought. By Professor LIONEL S. BEALE, M.D., F.R.S.
 On the Living and the Non-Living. By the same. On the New Materialism. By the same.
63. The Theory of Evolution taught by Hæckel, and held by his followers. By J. HASSELL, Esq.
 The Supernatural in Nature. By (the late) J. E. HOWARD, Esq., F.R.S.
64. Materialism. By Judge C. W. RICHMOND.

VOL. XVII.

65. { The Recent Survey of Western Palestine, and its Bearing upon the Bible. By TRELAWNEY
 SAUNDERS, Esq.
 Remarks on Climate in relation to Organic Nature. By Surgeon-General C. A. GORDON,
 M.D., C.B. Speeches by Sir J. RISDON BENNETT, V.P.R.S.; Sir JOSEPH FAYRER,
 K.C.S.I., M.D., F.R.S.; and others.
66. { On the Argument from Design in Nature, with some Illustrations from Plants. By (the
 late) W. P. JAMES, Esq., M.A.
 Considerations on the Unknown and Unknowable of Modern Thought; or, Is it possible to
 know God? By the Rev. J. J. LIAS, M.A. (then Hulsean Lecturer). Comments by
 (the late) Lord O'NEILL and others.
 On certain Theories of Life. By Surg.-Gen. C. A. GORDON, C.B., M.D., Hon. Phys. to
 the Queen.
 On Certain Definitions of Matter. By (the late) J. E. HOWARD, Esq., F.R.S.
67. { On the Absence of Real Opposition between Science and Revelation. By Professor G. G.
 STOKES, P.R.S. Comments by several leading scientific men.
 Babylonian Cities. By HORMUZZ RASSAM; with Remarks by Professor DELITZSCH, &c.
68. { The Origin of Man. By Archdeacon BARDSEY.
 Did the World Evolve Itself? By Sir E. BECKETT, Bart. (now Lord Grimthorpe).

VOL. XVIII.

69. On Misrepresentations of Christianity. By Lord O'NEILL (the late).
 Science not opposed to Revelation. By J. L. PORTER, D.D., D.C.L. (the late).
70. Recent Egyptological Research in its Biblical Relation. By the Rev. H. G. TOMKINS.
 Cuneiform Inscriptions as illustrative of the times of the Jewish Captivity. By W. ST.
 CHAD BOSCAWEN, F.R.Hist.Soc.
 Nebuchadnezzar, King of Babylon—On Recently Discovered Inscriptions of this King. By
 E. A. BUDGE, M.A., M.R.A.S.
 Buddhism. By Rev. R. COLLINS. Remarks by Dr. LEITNER (Lahore), Professor RHYS
 DAVIDS, Mr. RASSAM, Rev. S. COLES (Ceylon), &c. Also a full Note on Krishna.
71. Pessimism. By (the late) W. P. JAMES, Esq.
 On the Prehistoric Factory of Flints at Spiennes. By Rev. J. MAGENS MELLO, F.G.S.
 The Evolution of the Pearly Nautilus. By S. R. PATISON, Esq., F.G.S.
72. "On Prehistoric Man in Egypt and the Lebanon." By Sir J. W. DAWSON, C.M.G.,
 F.R.S., McGill University, Montreal. Remarks by Professors W. WARINGTON SMYTH,
 F.R.S., W. BOYD-DAWKINS, F.R.S., T. RUPERT JONES, F.R.S., T. WILTSHIRE, F.G.S.,
 Colonel HERSCHEL, F.R.S., Dr. RAE, F.R.S.

VOL. XIX.

73. { On the Inductive Logic. By Prof. R. L. DABNEY, D.D., LL.D. Speeches by Sir H.
 BARKLY, G.C.M.G., K.C.B., F.R.S., Sir J. LEFFROY, K.C.M.G., F.R.S., &c.
 On Evolution by Natural Selection. By J. HASSELL, Esq.
 Remarks on Evolution. By Professor VIRCHOW.
74. { On the Recency of the Close of the Glacial Epoch. By D. MACKINTOSH, Esq., F.G.S.
 Communications from Prof. T. RUPERT JONES, F.R.S., and others.
 On the recession of Niagara (with the United States Government Survey Diagrams).

- { On the Religion of the Aboriginal Tribes of India. By Professor J. AVERY. Remarks by General HAIG, Mr. E. RASSAM, and others.
 { On the Evolution of Savages by Degradation. By Rev. F. A. ALLEN, M.A.
 { Some Thoughts on the Evolution of Religions. By Rev. W. R. BLACKETT, M.A.
 75. { On the Relation of Fossil Botany to Theories of Evolution. By late W. P. JAMES, F.L.S.
 { Remarks by Sir R. OWEN, F.R.S., Prof. W. CARRUTHERS, F.R.S., Dr. J. BRAXTON HICKS, F.R.S., &c.
 { Was Primeval Man a Savage? By J. HASSELL, Esq.
 { Remarks on Evolution and Development. By Rev. J. WHITE, M.A.
 { On Some Characteristics of Primitive Religions. By Rev. R. COLLINS, M.A.
 { Human Responsibility. By Rev. G. BLENCOWE.
 76. { On the Worship and Traditions of the Aborigines of America. By Rev. M. EELLS, M.A.
 { Remarks by Professor J. O. DORSEY, U.S. Survey.
 { Note on Comparative Religions.

VOL. XX.

77. Special Address by the Institute's President, Sir G. G. STOKES, Bart., M.A., D.C.L., President of the Royal Society.
 Egypt: Physical, Historical, Literary, and Social. By J. LESLIE PORTER, D.D., D.C.L. (the late). Remarks by the Earl of BELMORE, Right Hon. A. S. AYRTON (the late), &c.
 On the Theory of Natural Selection and the Theory of Design. By Professor DUNS, D.D., F.R.S.E. Remarks by Right Hon. Lord GRIMTHORPE, &c.
 78. On Agnosticism. By J. HASSELL, Esq.
 On the Structure of the Gorilla. By E. CHARLESWORTH, Esq., F.G.S.; with illustration.
 Notes on the Antiquity of Man. By the EDITOR. The Chronology of Animal Life on the Earth prior to the Advent of Man. By Sir J. WILLIAM DAWSON, C.M.G., F.R.S., President of the British Association.
 Historical Evidences of the Migration of Abram. By W. ST. C. BOSCAWEN, F.R.Hist.Soc., with drawings. Notes by Professor SAYCE, E. A. W. BUDGE, Esq., &c.
 A Samoan Tradition of Creation. Rev. T. POWELL, F.L.S. (the late); Notes on the Islands.
 79. The Fundamental Assumptions of Agnosticism. By Rev. H. J. CLARKE.
 On Miracles. By Rev. H. C. M. WATSON. Remarks by Lord GRIMTHORPE, &c.
 On Accounts of the Creation. By W. P. JAMES, Esq., F.L.S. (the late).
 80. On Final Cause. By Professor K. L. DABNEY, D.D., LL.D.
 On Structure and Structureless. By Prof. LIONEL S. BEALE, M.B., F.R.S.
 On the Meteorology of Syria and Palestine. By Professor G. E. POST, F.L.S. (with chart). Remarks by Sir JOSEPH FAYRER, K.C.S.I., F.R.S., &c.
 On the Geographical Names on the List of Thothmes III. By Professor G. MASPERO (with map). Remarks by Sir CHARLES WILSON, K.C.B., K.C.M.G., F.R.S., Major C. R. CONDER, R.E., Dr. WRIGHT, &c. Note on Excavations round the Sphinx. By Prof. MASPERO.

VOL. XXI.

81. Results of an Expedition to Arabia Petraea and Palestine (with chart). By Professor E. HULL, F.R.S., Director of the Geological Survey of Ireland.
 Jewish, Phœnician, and Early Greek Art. By Rev. J. LESLIE PORTER, D.C.L. (the late).
 82. The Discoveries at Sidon.
 The Empire of the Hittites. By Rev. W. WRIGHT, D.D. Note on the Hittites.
 Canaan, Ancient and Modern. By Professor TRISTRAM, F.R.S.
 On Caves. By Professor T. MCK. HUGHES, F.L.S. (Cambridge), with comments by Sir J. W. DAWSON, C.M.G., F.R.S., Sir WARINGTON W. SMYTH, F.R.S., and others.
 Oriental Entomology. By Rev. F. A. WALKER, D.D., F.L.S. Notes by S. T. KLEIN, Esq., F.L.S., and others.
 Petra. By Professor E. HULL, F.R.S. (with chart).
 83. On Krishna. By Rev. R. COLLINS, M.A. Notes by Sir M. MONIER-WILLIAMS, K.C.I.E., Professors MAX MULLER, E. B. COWELL, DOUGLAS, DE LAGUPERIE, DR. LEITNER, and Dr. EDELSHEIM (the late).
 The Pedigree of the Coral Reefs of England. By S. R. PATTISON, F.G.S. Remarks by Sir G. G. STOKES, Bart., P.R.S.
 Practical Optimism. By the Most Rev. Bishop SAUMAREZ SMITH, D.D.
 84. Traditions of the Aborigines of North America. By Rev. S. D. PEET (with illustrations).
 On the Beauty of Nature. By Lord GRIMTHORPE, with special paper by Rev. W. ARTHUR, M.A.
 Evolution. By Rev. H. J. CLARKE, M.A. Remarks by Sir J. W. DAWSON, C.M.G., F.R.S.
 Appendices; The Jewish Nation and Diseases. Egyptian Discoveries in 1888. (Library List, &c.) The Sacred Books of the East. By Sir M. MONIER-WILLIAMS, K.C.I.E.

VOL. XXII.

85. Annual Address by the President, Sir G. G. STOKES, Bart., M.P., President of the Royal Society. Speeches by Sir H. BARKLY, K.C.B., F.R.S., Sir RISDON BENNETT, F.R.S., Sir F. L. MCCLINTOCK, F.R.S., Mr. H. RASSAM, &c.
 Note by the President on the one Origin of the Books of Révelation and of Nature.
 On Time and Space. By the Rev. W. ARTHUR.
86. On the Names on the List of Thothmes III at Karnac, their Geographical, Ethnographical, and Biblical relations. By G. MASPERO, with communications from Sir C. WILSON, K.C.B., F.R.S., Professor A. H. SAYCE, Rev. Canon LIDDON, Mr. LE PAGE RENOUF, Rev. Dr. EBERSHEIM, Major C. R. CONDER, Rev. H. G. TOMKINS, &c., with maps by G. MASPERO.
 On the Theory of Natural Selection and the Theory of Design. By Professor DUNS, D.D., with remarks by Lord GRIMTHORPE, the Most Rev. the BISHOP of SYDNEY, and others, and a note by Mr. T. FRANCIS RIVERS, F.L.S.
 On the late Professor ASA GRAY. By the EDITOR.
 Note on the importance of Babylonian Excavations. By the EDITOR.
 On Human Footprints in Nicaragua. By Dr. D. G. BRINTON.
87. The Aborigines of Australia, their Ethnic Position and Relations, by J. FRASER, LL.D., F.R.S. (N.S.W.), with remarks by many travellers; also an opinion by Professor MAX MÜLLER.
 Oriental Entomology. By Rev. F. A. WALKER, D.D., F.L.S., remarks by several entomologists, including a note by Mr. E. B. POULTON, F.R.S., on Mimicry.
88. A Physical Theory of Moral Freedom. By JOSEPH JOHN MURPHY; remarks by Sir J. FAYRER, K.C.S.I., F.R.S., the Hon. J. M. GREGORY, LL.D., of Washington, and others.
 The Botanical Geography of Syria and Palestine. By Professor G. E. POST, D.D., M.D., with notes by Eastern Travellers.
 On Flint Arrow Heads of delicate Structure. By the Rt. Hon. Sir C. MURRAY, K.C.B., also a note on Cave Deposits.

VOL. XXIII.

89. Annual Address by Sir M. MONIER-WILLIAMS, K.C.I.E., D.C.I., LL.D., Ph.D., Boden Professor of Sanscrit in Oxford University. Speeches by the BISHOP of DUNEDIN, Sir H. BARKLY, G.C.M.G., K.C.B., Sir RISDON BENNETT, F.R.S., late Mr. H. W. BRISTOW, F.R.S., &c.
 On a few of the Contrasts between the Essential Doctrines of Buddhism and of Christianity. By Sir M. MONIER-WILLIAMS, K.C.I.E., &c., &c.
 Coral Islands and Savage Myths. By H. B. GUPPY, Esq., M.B. Discussion, &c., by Sir G. G. STOKES, Bart., M.P., P.R.S., Captain W. J. L. WHARTON, R.N., F.R.S., the Hydrographer to the Admiralty, Mr. W. H. HUDLESTON, F.R.S., Professor JAMES GEIKIE, F.R.S., Mr. JOHN MURRAY, of the *Challenger* Expedition, &c.
 On the Keeling Atoll. By Dr. GUPPY.
90. Colours in Nature. By Rev. F. A. WALKER, D.D., F.L.S.
 On the Sciences of Language and of Ethnography. By Dr. LEITNER, Ph.D., LL.D., D.O.L.
 Modern Science and Natural Religion. By Rev. C. GODFREY ASHWIN, M.A.
 Note on Science and Religion. By Captain F. PETRIE, F.G.S.
 The Historical Results of the Excavations at Bubastis. By E. NAVILLE, Ph.D. Remarks by Sir C. NEWTON, K.C.B., Dr. REGINALD STUART POOLE, &c.
91. Notes on the Ethnology and Ancient Chronology of China. By Surgeon-General GORDON, M.D., C.B. Remarks by Dr. LEGGE, Prof. Chinese, Oxford Univ., Dr. BEAL, Prof. Chinese, London Univ., &c.
 On Cuts on Bone as evidence of Man's Existence in remote ages. By Prof. T. MCK. HUGHES, F.R.S. Remarks by Prof. RUPERT JONES, F.R.S., Prof. A. S. WOODWARD, F.G.S., Rev. J. M. MELLO, M.A., F.G.S., &c.
 The Butterflies and Moths of Africa. By W. F. KIRBY, F.E.S.
92. The Factors of Evolution in Language. By Mr. J. J. MURPHY. Remarks by Professor MAX MÜLLER.
 The Meaning and History of the Logos of Philosophy. By Rev. H. J. CLARKE.
 The Dawn of Metallurgy. By Rev. J. MAGENS MELLO, M.A., F.G.S. Remarks by Professor SAYCE, Major CONDER, Mr. J. ALLEN BROWN, F.G.S., and others.

VOL. XXIV.

93. Annual Meeting. The Cuneiform Inscriptions of Tel el Amarnâ. By the Rev. A. H. SAYCE, M.A., D.D., LL.D., Professor of Assyriology, Oxford University. Speeches by the Rt. Hon. Lord HALSBURY, Lord High Chancellor, Dr. NAVILLE, Sir H. BARKLY, K.C.B., F.R.S., &c., Sir E. OMMANNEY, C.B., F.R.S., Sir J. RISDON BENNETT, F.R.S., Captain E. W. CREAK, R.N., F.R.S., and others.
On the Canaanites. By Major C. R. CONDER, R.E., D.C.L.
94. Instinct and Reason. By C. COLLINGWOOD, Esq., M.A., M.B., M.R.C.P., F.L.S., &c. Remarks by Professor HULL, F.R.S., and others.
The Science of Rectitude as Distinct from Expedience. By Rev. H. J. CLARKE.
God in Nature. By Professor E. HULL, D.C.L., F.R.S., Director of the Geological Survey of Ireland.
Man's Place in Nature. A Note. By the EDITOR.
95. Land Tenure in Ancient Times in Palestine. By Rev. J. NEIL, M.A. Remarks by the Right Hon. Lord HALSBURY, Lord High Chancellor, Mr. F. SEEBOHM, Mr. S. BERGHEIM, Dr. CHAPLIN, and other Eastern Travellers.
The Botany and Entomology of Iceland. By Rev. F. A. WALKER, D.D., F.L.S. Remarks by Dr. J. RAE, F.R.S., Dr. G. HARLEY, F.R.S., Professor LOGAN LOBLEY, F.G.S., &c.
The Origin of Man. An address thereon by Professor RUDOLPH VIRCHOW.
96. The Dispersal of Plants as Illustrated by the Flora of the Keeling Islands. By H. B. GUPPY, Esq., M.B. Remarks thereon by Professor T. RUPERT JONES, F.R.S., Mr. JOHN MURRAY (*Challenger Expedition*), and others.
Sketch of the Geological History of Egypt and the Nile Valley. By Professor E. HULL, LL.D., F.R.S., F.G.S., &c., with map.

VOL. XXV.

97. The Monism, Pantheism, and Dualism of Brahmanical and Zoroastrian Philosophers. By Sir M. MONIER-WILLIAMS, K.C.I.E., D.C.L.
On the Post Glacial Period. By Professor W. UPHAM, Assistant State Geologist, U.S.A. (a note).
On Human Responsibility. By the Right Hon. Lord GRIMTHORPE. Remarks by Prebendary H. WACE, D.D., Principal of King's College, London.
98. Chinese Chronology. By Professor J. LEGGE, M.A., Oxford University. Remarks by Sir THOMAS WADE, G.C.M.G., and others.
The Garden of Eden, a criticism on the views of certain modern writers. By HORMUZZ RASSAM, Esq. Remarks by Sir G. G. STOKES, Bart., F.R.S., Sir J. W. DAWSON, C.M.G., F.R.S., Professor A. H. SAYCE, D.D., Mr. T. PINCHES, Colonel CONDER, D.C.L., &c., M. BERTIN, and others. With a map engraved by Mr. Stanford from the official surveys.
Annual Meeting.
Islâm. By Rev. W. St. C. TISDALL, M.A. Remarks by Sir T. FORD, Colonel CONDER, D.C.L., Dean GOULBURN, Rev. Dr. KELLE, Rev. H. LANSDALL, D.D., M.R.A.S., Mr. RASSAM, and other authorities.
99. On the Reality of the Self. By W. L. COURTNEY, M.A., LL.D.
Notes on the Philosophy and Medical Knowledge of Ancient India. By Surgeon-General Sir C. A. GORDON, M.D., K.C.B., Q.H.P. Remarks by Sir JOSEPH FAYRER, K.C.S.I., F.R.S., and others.
100. On the Apparent Cruelty of Nature. By Rev. T. WOOD, M.A. Remarks by Sir J. FAYRER, K.C.S.I., F.R.S., and others.
Deontology. By the Rev. H. J. CLARKE.

VOL. XXVI.

101. The Route of the Exodus. By Dr. E. NAVILLE. Speeches by Sir J. FAYRER, K.C.S.I., Sir J. COODE, K.C.M.G., and others.
From Reflex Action to Volition. By Dr. ALEX. HILL, Vice-Chancellor of Cambridge University, with important discussion.
102. The Weak Sides of Natural Selection. By J. W. SLATER, F.C.S., F.E.S. Remarks by Professor E. HULL, LL.D., F.R.S., and many others.
On Serpent Worship and the Venomous Snakes of India. By Sir JOSEPH FAYRER, M.D., K.C.S.I., F.R.S. Remarks by Sir RICHARD POLLOCK, K.C.S.I., Surgeon-General W. B. BEATSON CORNISH, C.I.E., C. A. GORDON, C.B., Admiral H. D. GRANT, C.B., and others, and an important special report by Dr. A. MUELLER, of Australia.

103. Some recent Discoveries in the Realm of Assyriology. By T. G. PINCHES, Esq., Brit. Mus. Remarks by Colonel CONDER, R.E., D.C.L., M. BERTIN, Mr. W. ST. C. BOSCAWEN, Rev. H. G. TOMKINS, and others.
The Philosophic Basis of the Argument from Design. By Professor BERNARD, D.D., T.C.D.
On Flint Bodies in the Chalk known as Paramoudra. By E. CHARLESWORTH, Esq. F.G.S. Illustrated.
104. The Glacial Period and the Earth-movement Hypothesis. By Professor JAMES GEIKIE, D.C.L., F.R.S. Remarks by Professors E. HULL, LL.D., F.R.S., LOGAN LOBLEY, F.G.S., Major-General DRAYSON, R.E., F.R.A.S., Mr. W. UPHAM, U.S. Govt. Assist. State Geologist, &c., &c.
Useful and Ornamental Stones of Ancient Egypt. By Sir J. WILLIAM DAWSON, C.M.G., F.R.S. Remarks by W. H. HUDLESTON, F.R.S., President of the Geological Society, Professor E. HULL, F.R.S., Mr. W. BRINDLEY, F.G.S., Colonel CONDER, R.E., D.C.L., Professor LOGAN LOBLEY, and others.
Causes of Climatal Changes. Current opinions reviewed by Sir J. W. DAWSON, C.M.G., F.R.S.

VOL. XXVII.

105. The work of the Institute in the present day. By the Right Hon. Lord HALSBURY, P.C., F.R.S., with speeches by Sir H. BARKLY, G.C.M.G., K.C.B., F.R.S., Sir G. BUCHANAN, F.R.S., Sir J. FAYRER, K.C.S.I., F.R.S., Sir F. YOUNG, K.C.M.G., Professor E. HULL, F.R.S., and others.
The Principles of Rank among Animals. By Professor H. W. PARKER, M.D.
On the Recession of Niagara Falls. By W. UPHAM, Assist. Geologist U.S. Govt.
106. How the Waters of the Ocean became Salt. By Professor E. HULL, LL.D., F.R.S. Remarks by Professor J. TYNDALL, D.C.L., F.R.S., Sir J. PRESTWICH, D.C.L., F.R.S., and others.
The List of Shishak. With map. By Professor MASPERO. With important discussion
An Inquiry into the Formation of Habit in Man. By Dr. A. T. SCHOFIELD. Remarks by Dr. ALEX. HILL, Master of Downing, Sir C. A. GORDON, K.C.B., Professor PARKER, &c., &c.
107. On the Alleged Scepticism of Kant. By W. L. COURTNEY, LL.D. Remarks by Archdeacons SINCLAIR (London) and THORNTON (Middlesex), Professors BERNARD, DUNS, and numerous others.
On the Comparison of Asiatic Languages. By Colonel C. R. CONDER, R.E., D.C.L. Remarks by Professor LEGGE (Oxford), and others.
108. A Possible Cause for the Origin of the Tradition of the Flood. By Sir J. PRESTWICH, K.C.B., D.C.L., F.R.S. Remarks by Sir J. W. DAWSON, C.M.G., F.R.S., Sir H. HOWORTH, K.C.I.E., M.P., F.R.S., Dr. H. WOODWARD, F.R.S., President of the Geological Society, Professor T. McK. HUGHES, M.A., F.R.S., Professor T. RUPERT JONES, F.R.S., Mr. J. ALLEN BROWN, F.G.S., Rev. J. M. MELLO, F.G.S., Mr. W. UPHAM, Assist. Govt. Geologist, U.S.A., and many others.

VOL. XXVIII.

109. The Religious ideas of the Babylonians. By T. G. Pinches, M.R.A.S., British Museum. Remarks by Colonel CONDER, R.E., D.C.L., Rev. Dr. LÖWY, Professor FRITZ HOMMEL, &c.
Chinese Ethics and Philosophy. By Sir CHARLES GORDON, K.C.B. Special statement by Sir THOMAS WADE, G.C.M.G., K.C.B., &c.
On the Luminiferous Ether. By Sir G. G. STOKES, Bart., *President*. Speeches by His Excellency the Hon. T. F. BAYARD, United States Ambassador, Sir H. BARKLY, G.C.M.G., K.C.B., F.R.S., Sir JOSEPH FAYRER, K.C.S.I., F.R.S., Professor HULL, F.R.S., Admiral GRANT, C.B., R.N., &c. (Annual Meeting).
110. Evolution and Design. By G. COX BOMPAS, F.G.S. Remarks by Professor BLAKE, F.G.S., Rev. J. M. MELLO, F.G.S., &c.
Archæology and Evolution. By R. H. WALKEY. Remarks by Professor LOBLEY, F.G.S., &c.
Holy Scripture illustrated and confirmed by recent discoveries in the East. By Professor E. HULL, F.R.S. Remarks by Professor J. H. GLADSTONE, F.R.S., Colonel CONDER, R.E., Mr. RASSAM, &c.
111. Buddhism and the Light of Asia. By Rev. R. COLLINS, M.A. Remarks by Professor LEGGE, Rev. G. U. POPE, D.D., the Rev. KENNETH MACDONALD, Professor ORCHARD, M.A., B.Sc., Mr. R. SCOTT MONCRIEFF, and many others.

- Stone Folk-lore. By Professor DUNS. Speeches by the Right Hon. the LORD CHANCELLOR, Sir H. BARKLY, G.C.M.G., K.C.B., F.R.S., Sir G. BUCHANAN, F.R.S., Sir J. FAYRER, K.C.S.I., F.R.S., Professor HULL, F.R.S., Sir C. GORDON, K.C.B., His Honour J. OTONBA PAYNE, &c. (Annual Meeting).
112. The Mechanical Conception of Nature. By Professor MACLOSKE, D.Sc., of Princeton College, U.S.A. Remarks by Rev. Prof. BERNARD, D.D., G. B. BUCKTON, Esq., F.R.S., and others.
- The Philosophy of Comte. By J. W. SLATER, F.C.S., F.E.S.
- On the supposed discovery of Remains belonging to an animal intermediate between man and the ape. By Professor E. HULL, F.R.S. (illustrated).
- The Passage of the Red Sea by the Israelites. By Major-General TULLOCH, C.B., C.M.G. (with map).

VOL. XXIX.

113. Jubilee Volume. Annual Address: The Perception of Light. By Sir G. G. STOKES, Bart., *President*. Speeches by Earl HALSBURY (Lord Chancellor), Sir H. BARKLY, G.C.M.G., F.R.S., Sir C. Gordon, K.C.B., Profs. E. HULL, F.R.S., and SAYCE.
- On Scientific Research and Biblical Study. By the Rev. Canon R. B. GIRDLESTONE, M.A.
- On Certain Inscriptions and Records Referring to Babylonia, Elam, and their Rulers, and other Matters. By THEOPHILUS G. PINCHES, M.R.A.S. With copies of tablets, &c., and arranged by the Author up to September 25th, 1897, with Opinions of Professors HOMMEL, SAYCE, and others. Communication from Professor A. H. SAYCE, D.D.
114. China's Place in Ancient History: A Fragment. By Surgeon-General Sir CHARLES A. GORDON, M.D., K.C.B., Q.H.P.
- Communications from Her Majesty the Queen and Her Royal Highness Princess Henry of Battenberg.
- The Polynesians and their Plant-Names. By H. B. GUPPY, M.B. Communication from Professor MAX MÜLLER, Dr. JOHN FRASER, F.R.S. (N.S.W.).
115. The Natural and the Artificial. By A. T. SCHOFIELD, Esq., M.D., M.R.C.S. Communications from Professor LIONEL S. BEALE, M.B., F.R.S., and others.
- Causes of the Ice Age. By WARREN UPHAM, Esq. Communications from Sir JOSEPH PRESTWICH, D.C.L., F.R.S. (late), Professor J. GEIKIE, LL.D., F.R.S., and others.
116. On Specimens in the Peter Redpath Museum of McGill University, illustrating the Physical Characters and Affinities of the Guanches or Extinct People of the Canary Islands. *Illustrated*. By Sir J. WILLIAM DAWSON, C.M.G., F.R.S., &c.
- Professor PUTNAM on some Guanche Skulls. Communications from Professor J. CLELAND, M.D., D.Sc., F.R.S., Dr. LAMBERT of Cairo.
- Miracles, Science, and Prayer. By the Rev. Chancellor J. J. LIAS, M.A.

VOL. XXX.

117. Annual Address: Chiefly on the Röntgen Rays. By Sir G. G. STOKES, Bart., *President*. Speeches by Earl HALSBURY (Lord Chancellor), the Rt. Hon. Lord KELVIN, G.C.V.O., Sir H. BARKLY, G.C.M.G., K.C.B., F.R.S., Sir JOSEPH FAYRER, Bart., K.C.S.I., F.R.S., Professor E. HULL, LL.D., F.R.S.
- Biblical Lands; their races, customs, &c. (with Map). By HORMUZD RASSAM, Esq. Remarks by G. PINCHES, Esq., M.R.A.S. (of British Museum), &c.
118. The History of Mānikka Vācagar, "the Foe of the Buddhists." By the Rev. G. U. POPE, D.D., with Appendix for Students.
- List of Publications in the Institute's Transactions on the Religions of the East.
- On some Relations of Mind and Body. By A. T. SCHOFIELD, M.D., with communications from Professors CALDERWOOD, LL.D., J. CLELAND, M.D., F.R.S., and Dr. SANSOM.
- The Classification of the Vertebrata. By Prof. J. CLELAND, F.R.S., J. HUTCHINSON, Esq., F.R.S., Inspector-General J. D. MACDONALD, F.R.S., Prof. H. W. PARKER, Dr. W. KIDD, &c.
119. The Proposed Scheme for the Embanking the Waters of the Nile. By Professor E. HULL, LL.D., F.R.S. Remarks by BALDWIN LATHAM, M.L.C.E., &c.
- Problems of Aboriginal Art in Australia. By the Right Rev. Bishop THORNTON, D.D.
- On Primitive Man. By Rev. J. M. MELLO. Communications from Sir J. W. DAWSON, C.M.G., F.R.S., Professors T. RUPERT JONES, F.R.S., E. HULL, F.R.S., H. G. SEELEY, F.R.S., and others.
120. Investigations regarding the submerged Terraces and River Valleys bordering the British Isles. By Professor E. HULL, LL.D., F.R.S. Remarks by Cavaliere W. P. JERVIS, Director of the Royal Museum, Turin, Professors ETHERIDGE, F.R.S., T. RUPERT JONES, F.R.S., LOGAN LOBLEY, F.G.S. &c.

VOL. XXXI.

121. **Annual Address. The age of the Earth as an abode fitted for life.** By the Right Hon. Lord KELVIN, G.C.V.O. Speeches by the Right Hon. Earl HALSBURY, P.C., F.R.S. (Lord Chancellor), Sir G. G. STOKES, Bart., F.R.S. (the President), Sir JOSEPH FAYRE, Bart., F.R.S., Sir SIDNEY SHIPPARD, G.C.M.G., Captain E. W. CREAK, R.N., F.R.S. Design in Nature. By Lord KELVIN. A note.
Where is Mount Sinai? By Professor E. HULL, LL.D., F.R.S., with the Ordnance Survey Map reduced.
Design as exemplified in the formation of the human foot. A note by Dr. GERARD SMITH, M.R.C.S.
122. **Herodotus.** His remarks bearing on Egyptian Geology in the light of recent Egyptian Research. By Rev. F. A. WALKER, D.D., F.L.S. Copious remarks by Sir J. W. DAWSON, C.M.G., F.R.S.
Herodotus. His remarks bearing on Egyptian Botany and Investigation. By same.
Physical conditions of the Mediterranean Basin which have given rise to a community of some species of Fresh Water Fishes in the Nile and Jordan Basins. By Professor E. HULL, F.R.S. (with map).
Tithe Giving amongst Ancient Pagan Nations. A plea for the Unity of the Human Race in early times. By Rev. H. LANSDALE, D.D., M.V.L., M.R.A.S., F.R.G.S. A note, Philological reasons for the same, given at the Congress of Orientalists by the Right Hon. F. MAX MULLER, M.A., D.C.L.
123. **Another possible cause of the Glacial Epoch.** By Professor E. HULL, LL.D., F.R.S. (with map), with remarks by Professors T. RUPERT JONES, F.R.S., W. S. GRESLEY, F.G.S., United States, Cavaliere JERVIS, F.G.S., Italy, and others.
The Literature of Egypt in the time of Moses. By J. N. FRADENBURGH, Ph.D., D.D., LL.D. With remarks by Colonel C. R. CONDER, R.E., D.C.L., &c.
Plan and purpose in Nature. By Dr. W. KILD. Remarks by Professors LIONEL S. BEALE, F.C.S., E. HULL, F.R.S., J. H. GLADSTONE, Ph.D., F.R.S., and others.
The Star Worshipers of Mesopotamia. By Rev. S. M. ZWEMER, F.R.G.S. With remarks by Dr. T. CHAPLIN and Colonel C. R. CONDER, R.E., D.C.L.
124. **Annual Address: The Perception of Colour.** By Sir G. G. STOKES, Bart., F.R.S., V.D. Speeches by the Right Hon. Lord KELVIN, G.C.V.O., F.R.S., the Right Hon. Lord LISTER, P.R.S., Sir C. GORDON, K.C.B., Archdeacon THORNTON, &c.
Sub-Oceanic Terraces and River Valleys off the coast of West Europe. By Professor E. HULL, LL.D., F.R.S. (with three plates). Remarks by Professors ETHERIDGE, F.R.S., T. McK. HUGHES, F.R.S., Cavaliere JERVIS, F.G.S., of the Royal Museum, Turin. General McMAHON, F.R.S., &c.

VOL. XXXII.

- Annual Address: Our Coal Resources at the close of the Nineteenth Century.** By Professor E. HULL, LL.D., F.R.S. Speeches by the President, Sir G. G. STOKES, Bart., F.R.S., Sir JOSEPH FAYRE, Bart., K.C.S.I., Rev. CANON GIRDLESTONE, M.A., and the Ven. Archdeacon THORNTON, D.D.
- The Unity of Truth: Being the Annual Address to the Victoria Institute for 1899.** By the Right Hon. Sir RICHARD TEMPLE, Bart., G.C.S.I.
- Life as compared with the Physical Forces.** By J. W. SLATER, Esq., F.C.S., F.E.S. Remarks by Professor LIONEL S. BEALE, F.R.S., Rev. Professor BERNARD, Dr. R. C. SHUTTLE, &c.
- The Worship and Traditions of the Aborigines of the Islands of the Pacific Ocean.** By Rev. M. EELLS, D.D., with remarks by DAVID HOWARD, Esq., D.L., Professor H. L. ORCHARD, M.A., D.Sc., &c.
- The Climate of Egypt in Geological, Prehistoric, and Ancient Historic Times.** By Dr. GRANT BEY.
- Remarks on the Past, Present, and Future of the Australian Flora.** By Rev. W. WOOLLS, Ph.D., F.L.S., with remarks by Sir FREDERICK YOUNG, Surgeon-General Sir C. A. GORDON, and a communication from (the late) Baron F. VON MUELLER, Ph.D., F.R.S.
- The Sub-Oceanic River-Valleys of the West African Continent and of the Mediterranean Basin (with Map).** By Professor E. HULL, M.A., LL.D., F.R.S. Communications from Professor T. RUPERT JONES, F.R.S., Cavaliere W. P. JERVIS, F.G.S., and Professor J. LOGAN LOBLEY, F.G.S.
- The Human Colour Sense and its accordance with that of Sound, as bearing on the "Analogy of Sound and Colour"** By Dr. JOHN D. MACDONALD, I.H.R.N., F.R.S.

- Creation or Evolution.** By Dr. WALTER KIDD, F.Z.S., with communications from Major TURTON, R.E., and Dr. J. H. GLADSTONE, F.R.S.
- Common Errors as to the Relation of Science and Faith.** By Professor G. MACLOSKE, D.Sc., LL.D.
- The Scope of Mind.** By Dr. ALFRED T. SCHOFIELD, M.P.C.S., with communications from Professors J. CLELAND, F.R.S., LIONEL BEALE, F.R.S., Dr. R. JONES, F.R.C.S., and R. ANDERSON, Esq., C.B., LL.D.
- Nationality.** Likenesses and Differences which point to many Races making up what are called Nationalities. By Professor T. McKENNY HUGHES, F.R.S., with remarks by the Right Rev. H. B. WHIPPLE, D.D., Bishop of Minnesota, Professor WESTLAKE, LL.D., Colonel CONDER, R.E., &c.
- Marks of Mind in Nature.** By Rev. Professor J. DUNS, D.D., F.R.S.E.
- Thalassographical and Thalassological Notes on the North Sea.** By Sgr. Cavaliere W. P. JERVIS, F.G.S. (with Map), with remarks by Professors E. HULL, LL.D., J. LOGAN LOBLEY, F.G.S., Rev. G. F. WHIDBORNE, F.G.S., &c.
- The Nature of Life (Part I).** By Professor LIONEL S. BEALE, F.R.S., with remarks by Dr. SHETTLE, Professor ORCHARD, M.A., B.Sc., and Rev. J. TUCKWELL.

VOL. XXXIII.

- Annual Address: The Origin of New Stars.** By Professor Sir ROBERT S. BALL, LL.D., F.R.S. Speeches by the President, Sir G. G. STOKES, Bart., F.R.S., and the Rev. Canon GIRDLESTONE, M.A.
- A short account of the Congrès International d'Histoire des Religions: held in Paris, September, 1900.** By THEOPHILUS G. PINCHES, Esq., LL.D., F.R.A.S.
- Vitality.** By Professor LIONEL S. BEALE, F.R.C.P., F.R.S., with remarks by Dr. A. T. SCHOFIELD, Professor E. HULL, LL.D., F.R.S., Professor ORCHARD, M.A., B.Sc., and Mr. DAVID HOWARD, D.L.
- On the Being of God.** By the Ven. Archdeacon SINCLAIR, D.D. Remarks by Professor ORCHARD, Rev. JOHN TUCKWELL, and Dr. WALTER KIDD.
- The Philosophy of Education.** By A. T. SCHOFIELD, Esq., M.D.
- Ethics and Religion.** By the Rev. Prebendary H. WACE, D.D., with remarks by Rev. Dr. WALKER, Rev. JOHN TUCKWELL, and others.
- Methods of Protection among Animals.** By WALTER A. KIDD, Esq., M.D., F.Z.S. Remarks by Professor HULL, F.R.S., and Professor ORCHARD.
- Questions Involved in Evolution from a Geological Point of View.** By Rev. G. F. WHIDBORNE, M.A., F.G.S., remarks by Mr. MARTIN ROUSE, B.L., and Rev. JOHN TUCKWELL.
- Eolithic Implements.** By Rev. R. ASHINGTON BULLEN, B.A., F.G.S., with remarks by Professor E. HULL, Professor RUPERT JONES, F.R.S., and others.
- Visit to the Hittite Cities, Elyuk and Boghaz Keoy.** By Rev. G. E. WHITE, Marsovan. Remarks by Dr. THEOPHILUS G. PINCHES, DAVID HOWARD, Esq., D.L., and others.
- Recent Investigations in Moab and Edom.** By Major-General Sir CHARLES W. WILSON, K.C.M.G., F.R.S. Remarks by Rev. Canon GIRDLESTONE and Professor E. HULL.
- Address of Condolence to H.M. the King on the Death of H.M. Queen Victoria.**
- Ancient Script in Australia.** By E. J. STATHAM, Esq., Assoc. M. Inst. C.E. Remarks by Sir G. G. STOKES, Bart., F.R.S., Commander G. P. HEATH, R.N., and others.
- Meeting, Monday, 1st April, 1901.** Gracious reply from H.M. the King to the Address of Condolence; sent through the Home Secretary.
- The Maori's Place in History.** By JOSHUA RUTLAND, Esq. Remarks by Dr. T. G. PINCHES, Rev. Dr. WALKER, Rev. W. SHAW, F.Z.S., and others.
- Pictorial Art among the Australian Aborigines.** By R. H. MATHEWS, Esq. Remarks by Professor LOBLEY, F.G.S., Rev. W. S. LACH SZYRMA, M.A., and others.
- The Wahabís: Their Origin, History, Tenets and Influence.** By Rev. S. M. ZWEMER. Remarks by Rev. G. F. WHIDBORNE and Dr. H. W. HUBBARD.
- The Arab Immigration into South East Madagascar.** By Rev. G. A. SHAW, F.Z.S., with remarks by E. S. M. PELOWNE, Esq., Professor E. HULL, Professor ORCHARD, and others.
- Hornets: British and Foreign.** By Rev. F. A. WALKER, D.D., F.E.S.
- The Divisions of the Ice Age.** By WARREN UPHAM, Esq., M.A., F.G.S.A. Remarks by Professor HULL, Professor LOBLEY, Dr. PINCHES, and Rev. JOHN TUCKWELL.
- The Sub-Oceanic Depression known as "La Fosse de Cap Breton," and the adjacent River Valleys of France and Spain.** By Professor J. LOGAN LOBLEY, F.G.S., with remarks by Captain G. P. HEATH, R.N., and Mr. DAVID HOWARD, D.L.

VOL. XXXIV.

- Annual Address: The Water Supply of Jerusalem. By Major-General Sir C. W. WILSON, R.E., F.R.S.
 The Springs of Character. By A. T. SCHOFIELD, Esq., M.D.
 Modifications in the Idea of God, produced by Modern Thought and Scientific Discovery, By Rev. Chancellor LIAS, M.A.
 The Preparation of the Earth for Man's Abode. By Professor J. LOGAN LOBLEY, F.G.S.
 Adaptation and Selection in Nature: their bearing on Design. By WALTER KIDD, Esq., M.D., F.Z.S.
 Physical History of the Norwegian Fjords. By Professor HULL, F.R.S.
 Physical History of the New Zealand Fjords. By J. M. MACLAREN, F.G.S.
 Iceland: Its History and Inhabitants. By Dr. J. STEFANSSON.
 Artesian Water in Queensland. By R. LOGAN JACK, LL.D.
 Locusts and Grasshoppers. By Rev. Dr. WALKER, F.L.S.
 Water essential to All Life. By Professor LIONEL BEALE, F.R.S.
 Procopius's African Monument. By M. L. ROUSE, B.L.
 Some Diseases mentioned in the Bible. By Dr. T. CHAPLIN,

VOL. XXXV.

- Annual Address. By Professor W. M. FLINDERS PETRIE, D.C.L.
 The Babylonian Story of the Creation, including Bel's Fight with the Dragon. By THEOPHILUS G. PINCHES, Esq., LL.D., M.R.A.S.
 The Future of Islam. By Professor D. S. MARGOLIOUTH, D.Litt., Laudian Professor of Arabic, Oxford University.
 The Arya Samaj. By Rev. H. D. GRISWOLD, M.A., Ph.D., Missionary, Lahore, India.
 On the Unseen Life of our World and of Living Growth. By Professor LIONEL S. BEALE, F.R.C.P., F.R.S., Government Medical Referee for England.
 The Cheesewring, Cornwall, and its Teachings. By Professor EDWARD HULL, LL.D., F.R.S., F.G.S.
 The Water Supply of Jerusalem. By ERNEST W. GURNEY MASTERMAN, Diploma in Public Health, Cambridge.
 Modern Theories concerning the composition of Holy Scripture. By Rev. JOHN TUCKWELL, M.R.A.S.
 On the Geological Relationship of the Volcanoes of the West Indies. By J. W. SPENCER, M.A., Ph.D., F.G.S.
 Volcanic Action and the West Indian Eruptions of 1902. By J. LOGAN LOBLEY, F.G.S., F.R.G.S.
 Report on the Congress of Orientalists held at Hamburg in September, 1902. By THEOPHILUS G. PINCHES, Esq., LL.D., M.R.A.S.
 The Laws of the Babylonians, as recorded in the code of Hammurabi. By THEOPHILUS G. PINCHES, Esq., LL.D., M.R.A.S.
 Lecture on "Experiences in South Africa during the War." By the Rev. W. H. FRAZER, D.D., late Acting Chaplain to the Forces.
 The Living God of Living Nature from the Science Side. By Professor LIONEL S. BEALE, F.R.C.P., F.R.S.

VOL. XXXVI.

- Annual Address. By the Rt. Hon. the Earl of HALSBURY, D.C.L., F.R.S.
 The Genesis of Nature. By Rev. G. F. WHIDBORNE, M.A., F.G.S.
 Ancestral Worship (lecture). By Rev. ARTHUR ELWIN.
 Two Paths, one Goal. By Dr. WALTER A. KIDD, F.Z.S. (being an examination of Bishop TEMPLE'S Bampton Lectures for 1884.)
 On the Hot Lakes District, New Zealand. By Miss HILDA BOORD.
 Observations on Irrigation Works in India. By C. W. ODLING, Esq., C.I.E., M.Inst.C.E.
 On the Age of the Last Uprise in the British Isles. By Professor EDWARD HULL, LL.D., F.R.S.
 On the Samaritan Text of the Pentateuch. By Rev. Canon GARRATT, M.A.
 The Samaritan Passover of the year 1861. By Rev. Canon HAMMOND, LL.B.
 The Conception of the Great Reality. By SYDNEY T. KLEIN, Esq., F.L.S., F.R.A.S.

- On the Synchronous Chronology of the Kings of Israel and Judah. By FREDERICK GARD FLEAY, Esq., M.A.
 Notes on the Thickness of the Lucerne Glacier of the Post-Pliocene Period. By Professor EDWARD HULL, F.R.S.
 Prehistoric Remains, with drawings, near Tenda, Italy. By Cav. W. P. JERVIS, F.G.S.
 On the Origin of the Marine (Halolimnic) Fauna of Lake Tanganyika. By W. H. HUDLESTON, Esq., M.A., F.R.S.

VOL. XXXVII.

- Annual Address. By Dr. SILVANUS P. THOMPSON, F.R.S.
 The Right Way in Psychology. By Rev. F. STORRS TURNER, B.A. Remarks by Dr. SCHOFIELD, Rev. J. TUCKWELL, and others.
 On Confucianism. By Rev. ARTHUR ELWIN.
 The Rajputs and the History of Rajputana. By Colonel T. HOLBEIN HENDLEY, C.I.E. Remarks by General HALLIDAY, Professor E. HULL, F.R.S., and others.
 The Growth of the Kingdom of God. By Rev. J. BRADFORD WHITING, M.A.
 Biblical Astronomy. By Lieut.-Colonel G. MACKINLAY. Remarks by Commander CABORNE, C.B., Dr. HEYWOOD SMITH, Professor SAYCE, Canon GIRDLESTONE, and others.
 Geological Exterminations. By Dr. CHARLES B. WARRING, M.A. Remarks by Rev. Dr. IRVING, Dr. W. KIDD, and others.
 The Nebular and Planetesimal Theories of the Earth's Origin. By WARREN UPHAM, Esq., M.A., F.G.S.A.
 On Dr. Nansen's Bathymetrical Researches in the Arctic Ocean as Compared with those on the Atlantic Coast of Europe. By Professor E. HULL, LL.D., F.R.S.
 The Resurrection of Our Lord and Saviour Jesus Christ (Address). By Rev. Canon R. B. GIRDLESTONE, M.A.
 The Influence of Physiological Discovery on Thought. By EDWARD P. FROST, Esq., D.L., J.P.
 The Messiah of Qādiān. By Rev. H. D. GRISWOLD, M.A., Ph.D. Remarks by Colonel ALVES, Colonel HENDLEY, Mr. ROUSE, Mr. J. O. CORRIE, and others.
 The Minerals and Metals mentioned in the Old Testament and their influence on the Social and Religious History of the Nations of Antiquity. By Cav. W. P. JERVIS, F.G.S.

VOL. XXXVIII.

- The Bearing of Recent Oriental Discoveries on Old Testament History. By Rev. JOHN URQUHART. Being the essay for which "The Gunning Prize" was awarded by the Council.
 Iceland: Its History and Inhabitants. II. By Dr. JON STEFANSSON, Ph.D.
 Evolutionary Law in the Creation Story of Genesis. By Rev. A. IRVING, B.A., D.Sc.
 Biological Change in Geological Time. By Professor J. LOGAN LOBLEY, F.G.S., F.R.G.S.
 The Bible Pedigree of the Nations of the World, as attested and expanded by ancient Records and Traditions, and by early and long-lasting national Names. By MARTIN L. ROUSE, Esq., B.L.
 The Bearing of Recent Oriental Discoveries on Old Testament History. Being the second in order of merit of the "Gunning Prize Essays." By Rev. ANDREW CRAIG ROBINSON, M.A.
 The Early Celtic Churches of Britain and Ireland (with illustration). By Miss ELEANOR H. HULL, author of *Early Christian Ireland*, etc. With lantern illustrations.
 The Bible in the Light of Modern Science. Abstract of a Lecture delivered by WILLIAM WOODS SMYTH, Esq., F.Med.Soc.Lon. With lantern illustrations.
 Ice or Water. By Sir HENRY HOWORTH, D.C.L., F.R.S. Review by Professor EDWARD HULL, LL.D., F.R.S. (Secretary)
 The Zodiacal Arrangement of the Stars: in its Historical and Biblical Connections. By Rev. A. B. GRIMALDI, M.A. (Camb.).
 The Morning Star in the Gospels. By Lieut.-Colonel GEORGE MACKINLAY, R.A. (Ret.).

VOL. XXXIX

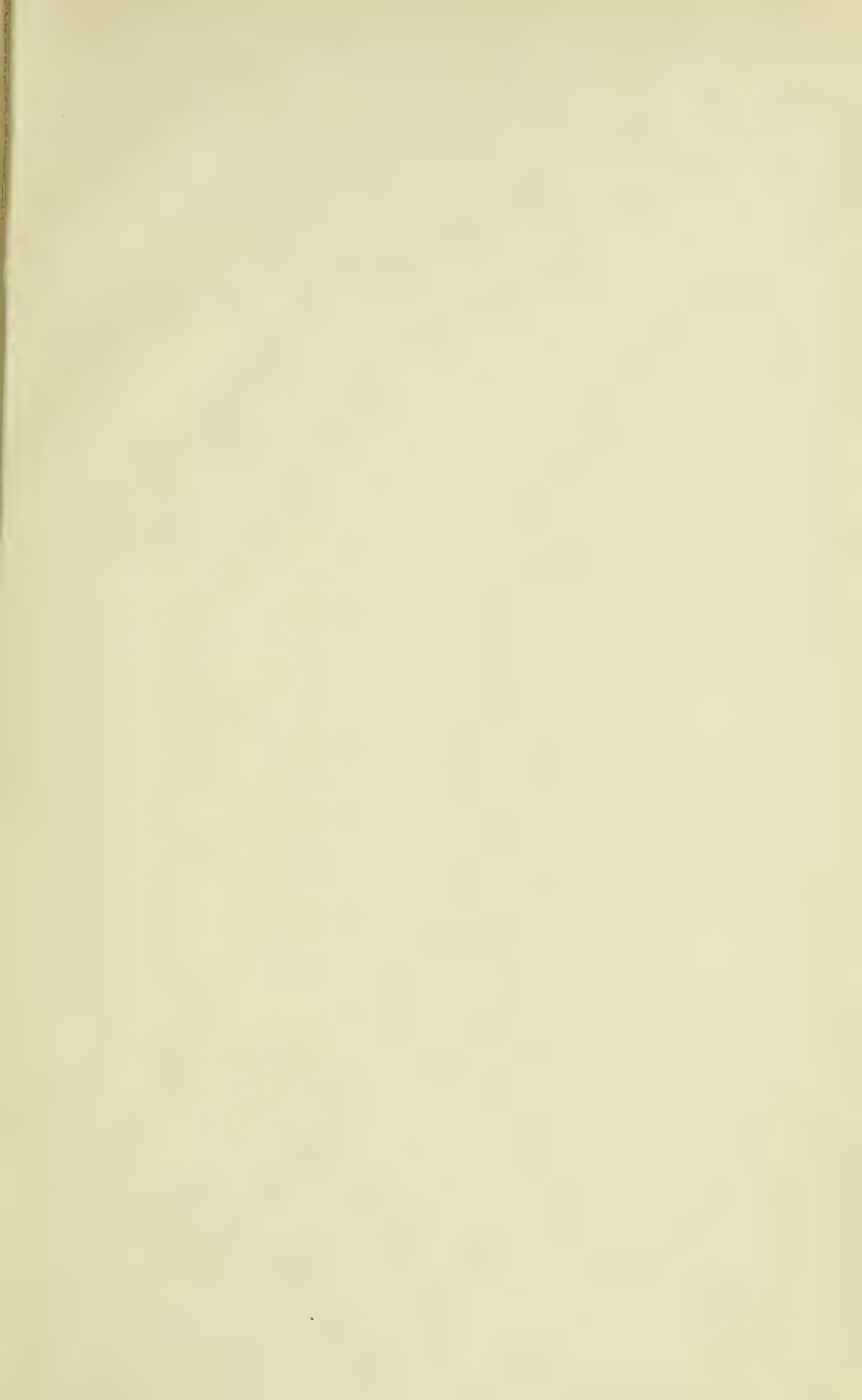
- Annual Address. The Development of the Religious Faculty in Man, apart from Revelation. By the Right Rev. Bishop WELLDON, D.D.
- Researches in Sinai. By Prof. W. M. FLINDERS PETRIE, D.C.L. Review by the Secretary.
- The San Francisco and Valparaiso Earthquakes and their causes (with map). By WARREN UPHAM, Esq., D.Sc., F.G.S. (America).
- The Scriptural Idea of Miracles. By Rev. Canon R. B. GIRDLESTONE, M.A.
- The Pedigree of the Nations, No. II. By MARTIN L. ROUSE, Esq., B.L.
- The History of the Spread of the European Fauna. By Prof. J. LOGAN LOBLEY, F.G.S.
- Orissa: A little known province of the Indian Empire. With some personal Reminiscences. By C. W. ODLING, Esq., C.S.I.
- Survivals of Primitive Religion among the people of Asia Minor. By the Rev. G. E. WHITE, Dean of Anatolia College.
- Plant Distribution from an Old Standpoint. By H. B. GUPPY, Esq., M.B., F.R.S.E.
- Exploration of Asia Minor, as bearing on the Historical Trustworthiness of the New Testament. By Prof. Sir WILLIAM M. RAMSAY, D.C.L.
- Recent Discoveries in Palestine in Relation to the Bible. By Dr. ERNEST W. G. MASTERMAN.
- Mencius. By the Rev. F. STORRS TURNER, B.A.

VOL. XL.

- Annual Address. The Bible and Astronomy. By Mr. E. WALTER MAUNDER, F.R.A.S.
- Primeval Man in Belgium. By Rev. D. GATH WHITLEY.
- The influence of the Glacial Epoch upon the Early History of Mankind. By Rev. Professor G. FREDERICK WRIGHT, D.D., LL.D.
- Resemblances between Indian and Jewish Ideas and Customs. By Colonel T. HOLBEIN HENDLEY, C.I.E.
- The Glaciers, Past and Present, in the South Island of New Zealand, together with the great Vertical Movements of the Ground. By Mr. C. DILLWORTH FOX.
- A Recent Visit to Petra. Lecture delivered by Mr. ARTHUR SUTTON, F.L.S.: a short account by the SECRETARY.
- Philosophy and Evolution. By Professor H. LANGHORNE ORCHARD, M.A., B.Sc.
- The Spread of the Existing Animals through Europe and to the Islands of the Atlantic, based on Dr. SCHARFF's recent work, "European Animals." By Professor EDWARD HULL, LL.D., F.R.S.
- The Decay of Ultramontaniam from an Historical Point of View. By Rev. CHANCELLOR J. J. LIAS, M.A.
- The American Fauna and its Origin. By Professor J. LOGAN LOBLEY, F.G.S.
- The Shia Turks. By Rev. G. E. WHITE, M.A., B.D., Dean of Anatolia College, Turkey.
- On the Evidence of Malay, Japanese, Arabian and Persian Admixture in the Inca or Keshua Language of Peru, amongst the Aymara Language of the Peasant Class. By Mr. F. W. CHRISTIAN, B.A.
- List of Officers, Members, etc.

LONDON :

HARRISON AND SONS, PRINTERS IN ORDINARY TO HIS MAJESTY,
ST. MARTIN'S LANE.



MCZ ERNST MAYR LIBRARY



3 2044 128 417 987

